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KINGSTON, ONTARIO

CALENDAR

OF

Queen's College and University

KINGSTON, CANADA,

FOR THE YEAR 1905-1906.

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KINGSTON:
PRINTED FOR THE UNIVERSITY BY THE BRITISH WHIG.
1905.

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1905/6

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ACADEMIC YEAR.

1905.

May 23—Notice of intention to compete for Matriculation Scholarships to be given in writing to the Registrar.
July 2—Matriculation examinations begin at the University and every Collegiate Institute and High School in Ontario.
Sept. 1—Applications accompanied by fee for Supplemental Pass or Matriculation examinations to be made to the Registrar.
" 12—Arts and Science Supplemental Pass examinations begin.
" 14—Supplemental Matriculation examinations begin.
" 20—Medical Supplemental examinations begin.
" 27—Classes in Arts, Applied Science, Medicine and Mining open.
Oct. 4—Holiday for Athletic Games.
" 16—University Day.
" 18—Candidates for B.D., Supplemental and Matriculation examinations in Theology must give notice of their intention to appear.
" 27—B.D. Supplemental and Matriculation examinations in Theology begin.
Nov. 1—Classes in Theology open.
Dec. 23—Christmas Holidays begin.

1906.

Jan. 9—Classes re-open.
Feb. 28—Holiday.
Mar. 19—Time expires for receiving Theses for Ph.D., D.Sc., and Essays for University Prizes.
" 22—Class work in Medicine closes only for those presenting themselves for M.D., C.M.
" 23—Examinations in Medicine begin.
" 28—Class work in Arts, Applied Science and Mining Closes.
April 2—Examinations in Arts, Applied Science and Mining begin.
" 7—Class work in Theology closes.
" 11—Examinations in Theology begin.
" 12—Medical Convocation.
" 16—Class work in Medicine resumes.
" 24—Statutory Meeting of Senate for conferring Degrees, &c.
" 25—Convocation for distributing prizes, announcing Honours and laureating graduates in Arts, Science and Theology.
May 18—Class work in Medicine closes for those taking the eight months' course.

UNIVERSITY OFFICERS.

BOARD OF TRUSTEES.

Retire April 1909.	R. Vashon Rogers, B.A., LL.D., K.C.	Kingston
Retire April 1908	Rev. M. McGillivray, M.A., D.D.	Kingston
	Rev. John Mackie, M.A., D.D.	Kingston
	Rev. Robert H. Warden, D.D.	Toronto
	G. M. Macdonnell, B.A., K.C.	Kingston
	Hugh Waddell	Peterboro
	John McIntyre, M.A., K.C.	Kingston
	Donald M. McIntyre, B.A.	Kingston
Retire April 1907	Rev. W. T. Herridge, D.D.	Ottawa
	Rev. D. R. Drummond, M;A	St. Thomas
	Rev. J. Edgar Hill. D.D.	Montreal
	Sheriff Maclennan, B.A	Lindsay
	Sir Sanford Fleming, K.C.M.G., LL.D.	Ottawa
	D. B. MacLennan, M.A., K.C.	Cornwall
	P. C. McGregor, B.A., LL.D.	Almonte
Retire April 1906	Rev. Thomas Wardrope, D.D	Guelph
	Rev. Robert Campbell, M.A., D.D.	Montreal
	Rev. E. D. McLaren, M.A., D.D.	Toronto
	James Douglass, B.A., LL.D.	New York
	And. T. Drummond, B.A., LL.D.	Toronto
	Hon. E. H. Bronson	Ottawa
	Matthew Leggat	Hamilon
	George Gillies, B.A	Toronto
Retire April 1905	Rev. G. M. Milligan, B.A., D.D., LL.D.	Toronto
	Rev. Robert Campbell, D.Sc	Perth
	Hon. Mr. Justice Maclennan, LL.D.	Toronto
	Francis H. Chrysler, B.A., K.C.	Ottawa
	J. Roberts Allan	Ottawa
	John Charlton	Lynedoch
	H. A. Calvin	Kingston

Hon. Mr. Justice Maclennan, LL.D .... Chairman.
Geo. Y. Chown, B.A. ..... Secretary-Treasurer.

The Annual Meeting of the Board will be held in the Senate Chamber on the evening of Wednesday, April 25th.

UNIVERSITY COUNCIL.

The Council consists of the Chancellor, the Trustees, the members of the Senate, and an equal number of elective members.

The Chancellor is elected by the Council, except when two or more candidates are nominated, in which case the elecion is by registered graduates and alumni. He holds office for three years, and, as highest officer of the University, presides at meetings of the Council and Convocation, and at statutory meetings of Senate. In his absence he is represented by the Vice-Chancellor.

Of the elective members eight retire annually, except in every sixth year when ten retire. Successors are elected by registered graduates and alumni. Retiring members may be re-elected.

The Council has power to elect five trustees (one trustee retiring annually); to discuss all questions relating to the College and its welfare; to make representations of its views to the Senate or the Board of Trustees; to decide on proposals for affiliation and to arrange all matters pertaining to the installation of the Chancellor, to its own meetings and business, the meetings and proceedings of Convocation, and the fees for membership, registration and voting.

Convocation for the conferring of degrees, etc., will be held upon Wednesday, April 25th, 1906.

ELECTIVE MEMBERS IN THE ORDER OF THEIR RETIRING.

	John Marshall, M.A.	Kingston.
	J. R. Lavell, B.A,,	Smith's Falls.
	Rev. James Carmichael, B.D.	King.
Retire	W. A. Logie, M.A , LL.B.	Hamilton.
1910	Judge Fraleck, B.A	Belleville.
	R. H. Cowley, M.A.	Ottawa.
	R. S. O'Loughlin, M.A.	New York.
	Rev. W. W. Peck, M.A., LL.B.	Napanee.
	Francis King, M.A.	Kingston
	W. F. Nickle, B.A.	Kingston.
	Rev. R. Laird, M.A.	Vancouver, B.C.
	Rev. N. Macpherson, M.A., B.D.	Indianapolis.
Retire	Rev. D. Strachan, B.A	Brockville.
1909.	Andrew Hayden, M.A.	Ottawa.
	Rev. James Binnie, M.A., B.D	Tweed.
	D. D. Calvin, B.A.	Kingston.
	J. H. Mills, M.A.	Waterford.
	T. H. Farrell, M.D.	Utica, N.Y.
	R. V. Rogers, K.C., B.A., LL.D.	Kingston.
	H. A. Calvin.	Kingston.
	J. M. Farrell, B.A.	Kingston.
Retire	R. J. Maclennan, B.A.,	Toronto.
1908	R. M. Dennistoun, B.A.	Peterboro.
	E. B. Echlin, B.A., M.D.	Ottawa.
	Rev. J. K. Macmorine, M.A., D.D.	Kingston.
	Geo. W. Mitchell, M.A.	Cobourg.

Retire 1907	A. G. Farrell, B.A.	Smith's Falls.
	W. L. Grant, M.A.	St. Andrew's College.
	Rev. E. D. Maclaren, D.D.	Toronto.
	H. M. Mowat, B.A., LL.B.	Toronto.
	H. R. Duff, M.D.	Kingston.
	Geo. Bell, B.A.	Toronto.
	C. F. Hamilton, M.A.	Ottawa.
Retire 1906	R. S. Minnes, M.A., M.D.	Ottawa.
	Rev. J. Hay, M.A., B.D.	Renfrew.
	P. C. McGregor, B.A., LL.D.	Almonte.
	Rev. James Wallace, M.A.	Lindsay.
	Jas. Douglas, B.A., LL.D.	New York.
	E. R. Peacock, M.A.	Toronto.
	J. McD. Mowat, B.A.	Kingston.
	Rev. A. H. Scott, M.A.	Perth.
Retire 1905	D. M. McIntyre, B.A.	Kingston.
	Rev. J. Cumberland, M.A.	Stella.
	Rev. J. D. Boyd, B.A.	Kingston.
	Gordon W. Mylks, M.D.	Kingston.
	Rev. F. G. Kirkpatrick, B.A.	Lombardy.
	J. A. Hutchison, K.C.	Brockville.
	Eliza S. Fitzgerald, M.A.	Cornwall.
	G. F. Henderson, B.A.	Ottawa.

CHANCELLOR:

SIR SANFORD FLEMMING, C.E., K.C.M.G., LL.D.

PRINCIPAL AND VICE-CHANCELLOR:

VERY REV. DANIEL MINER GORDON, M.A., D.D.

VICE-PRINCIPAL:

JOHN WATSON, M.A., LL.D.

REGISTRAR:

GEORGE Y. CHOWN, B.A.

OFFICERS OF INSTRUCTION:

I.—In Theology.

Very Rev. D. M. Gordon, M.A., D.D. Primarius Professor of Divinity.

Rev. D. Ross D.D. ..... Professor of Apologetics and New Testament Criticism.

Rev. W. G. Jordon, B.A., D.D. ..... Professor of Hebrew and Old Testament Criticism.

Rev. John Macnaughton, M.A. ..... Professor of Church History and History of Dogma.

Rev. G. M. Milligan, D.D., LL.D. Lecturer on Pastoral Theology.

Rev. J. S. Carruthers. ..... "Watkins" Lecturer on Elocution.

II.—In Arts.

Nathan F. Dupuis, M.A., F.B.S., Edin. ..... Professor of Mathematics.

Rev. George D. Ferguson, B.A. ... Professor of History.

John Watson, M.A., LL.D. ..... Professor of Moral Philosophy.

D. H. Marshall, M.A., F.R.S.E. ... Professor of Physics.

James Cappon, M.A ..... Professor of English Language and Literature.

J. Macgillivray, Ph.D. (Leipsic) ... Professor of German.

S. W. Dyde, M.A., D.Sc., LL.D. ... Professor of Mental Philosophy.

Rev. Jas. Fowler, M.A., F.R.S.C. . "The John Roberts Allan" Pro-Professor of Botany.

Adam Short, M.A. ..... "The Sir John A. Macdonald" Professor of Political and Economic Science.

A. P. Knight, M.A., M.D. ..... "The John Roberts" Professor of Animal Biology and Physiology.

W. G. Jordan, B.A., D.D. ..... Professor of Hebrew.
W. J. Pike, M.A., B.A. (Cantab.) .. Professor of Latin.
Rev. Alexander B. Nicholson, B.A. Professor of Comparitive Philology and Sanscrit.
John Marshall, M.A. ..... Assistant Professor of English Language and Literature.
P. G. C. Campbell, M.A. (Oxon) ... Professor of Romance Languages.
T. Callander, M.A. (Abdn.) B.A. (Oxon) ..... Professor of Greek.
John Matheson, M.A. ..... "The William Nickle" Assistant to the Professor of Mathematics.
J. A. Petrie, B.A. ..... "The Robert Waddell" Fellow in Hebrew.
R. A. Wilson, M.A. ..... Fellow in Mental Philosophy.
J. M. MacEachran, M.A. ..... Fellow in Moral Philosophy.
J. A. Donnell, M.A. ..... Fellow in Political Science.
L. M. MacDonnell, M.A. ..... '01 Fellow in English.

III.—In Practical Science.

Nathan F. Dupuis, M.A, F.B.S. F.R.S.C. ..... Professor of Mathematics and Mechanism and Dean of Faculty.
Wm. L. Goodwin, B.Sc., (Lond.) D.Sc., (Edin.) F.R.S.C. ..... Professor of Chemistry, Director of School of Mining.
D. H. Marshall, M.A., F.R.S.E. ... Professor of Physics.
William Nicol, M.A. ..... Professor of Mineralogy and Assaying.
Willet G. Miller, B.A. ..... Professor of Geology and Petrography.
Rev. Jas. Fowler, M.A., F.R.S.C. . Professor of Botany.
A. P. Knight, M.A., M.D. ..... Professor of Animal Biology and Physiology.
L. W. Gill, B.Sc. ..... Professor of General and Electrical Engineering.
Stafford Kirkpatrick, M.Sc. ... Professor of Metallurgy.
Reginald Brock, M.A. ..... Acting Professor of Geology and Petrography.
J. C. Gwillim, B.Sc. ..... Professor of Mining Engineering.
N. R. Carmichael, M.A. ..... Associate Professor of Physics.
A. K. Kirkpatrick, C.E. ..... Professor of Civil Engineering.

A. McPhail, B.Sc.....Acting Professor of General Engineering.

W. O. Teague, S.B.....Lecturer in Mechanical Engineering.

Jno. Waddell, B.A., D.Sc., Ph.D..Lecturer on Chemistry.

A. Kennedy, M.A.....Lecturer on Applied Mathematics.

W. C. Baker, M.A.....Demonstrator in Experimental Physics on "The RoberWaddell" Foundation.

IV.—In Medicine.

Medicine.

James Third, M.D .....Professor of the Principles and Practice of Medicine.

John Herald, M.A., M.D.....Professor of Clinical Medicine and Dermatology.

James W. Campbell, M.D.....Professor of Materia Medica and Therapeutics.

Edward Ryan, B.A., M.D.....Associate Professor of Clinical Mediclne.

A. E. Ross, B.A., M.D.....Demonstrator ot Pharmacology.

W. C. Barber, M.D., Tor.; M.D., C.M., Vic .....Clinical Assistant.

W. C. Herriman, M.B., Toronto...Clinical Assistant.

Surgery.

Hon. Michael Sullivan, M.D.....Professor of the Principles and Practice of Surgery.

D. E. Mundell, B.A., M.D .....Assistant Professor of Surgery.

W. G. Anglin, M.D., M.R.C.S., F.O.S .....Professor of Clinical Surgery.

Obstetrics and Gynaecology.

R. W. Garrett, M.A., M.D.... ...Professor.

Isaac Wood, M.A., M.D., M.R.C.S., Eng., F.O.S., Edin..... .....Associate Professor.

Pediatrics.

Isaac Wood, M.A., M.D., M.R.C.S., Eng., F.O.S. Edin., Professor.

Opthalmology, Otology, Laryngology and Rhinology.

J. C. Connell, M.A., M.D., Dean of the Faculty.

Sanitary Science.

W. T. Connell, M.D., M.R.C.S, Eng., L.R.C.P., Lond., Professor.

Pathology and Bacteriology.

W. T. Connell, M.D., M.R.C.S., Eng., L.R.C.P., Lond., Secretary of the Faculty.....Professor.

A. R. B. Williamson, M.A., M.D., M.R.C.S., L.R.C.P.....Demonstrator.

Anatomy.

Edward Ryan, B.A., M.D..... Professor of Anatomy.

D. E. Mundell, B.A., M.D. .....Professor of Anatomy.

G. W. Mylks, M.D., C.M.....Assistant Professor and Demonstrator of Anatomy.

C. A. Morrison, M.D., C.M. .....Demonstrator of Anatomy.

A. W. Richardson, B.A., M.D., G. W. Mylks, M.D., and A. E. Ross, B.A., M.D..... ... .Demonstrators of Anatomy.

F. Etehrington, M.D., M.R.C.S., Edin..... ....Tutor in Anatomy and Lecturer in Animal Morphology.

Medical Jurisprudence and Toxicology.

A. R. B. Williamson, M.A., M.D., M.R.C.S., L.R.C.P., Professor.

John McIntyre, M.A., K.C... .....Lecturer in Medical Jurispruence

Mental Diseases.

C. K. Clarke, M.D..... ...Medical Superintendent Hospital for the Insane.

Biology, Physiology and Histology.

James Fowler, M.A., F.R.S.C.....Professor of Botany and Vegetable Histology.

A. P. Knight, M.A., M.D.....Professor of Animal Biology, Physiology and Histology.

A. R. B. Williamson ....Tutor in Biology.

I. G. Bogart, M.D..... Tutor in Histology.

Chemistry and Applied Chemistry.

W. L. Goodwin, B.Sc., (Lond.) D.Sc., (Edin) ....Professor.

Isaac Wood, M.A., M.D., M.R.C.S., L.R.C.P..... . .. Lecturer.

John Waddell, Ph.D., Leip., D.Sc., Edin..... .....Lecturer.

Physics.

D. H. Marshall, M.A., F.R.S.E....Professor of Physics.
N. R. Carmichael, M.A.....Associate Professor of Physics.
W. C. Baker, M.A.....Demonstrator in Physics.

Librarian and Secretary of the Faculty.

Professor W. T. Connell.

V.—Examiners in Law.

J. L. Whiting, M.A., K.C..... Criminal Law.
R. Vashon Rogers, B.A., K.C. LL.D. Common Law.
G. M. Macdonnell, B.A., K.C.....The Law of Real Property.
R. T. Walkem, LL.D., K.C.....Equity.
John McIntyre, M.A., K.C.....Medical Jurisprudence.

OTHER OFFICERS.

Registrar of University Council.

Francis King, M.A.

Observatory Board.

The Principal.

Curators of Library.

Professors Ross, Knight, Shortt and Macgillivray.

Librarian.

Miss Lois Saunders.

Curators of Museum.

Professors of Biology and Geology.

Examiner in Medical Matriculation.

Arthur E. Ross, B.A., M.D.

Examiners in Gaelic.

Rev. M. Macgillivray, M.A., and John Matheson, M.A.

Janitor.

John V. Burton.

TIME TABLE—ARTS.

HOUR.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	Jr. English. A.B. *German. Sr. Hebrew. *Mineralogy.	Jr. English. A. *German. *Mineralogy.	Jr. English. B. *German. Sr. Hebrew. *Mineralogy.	Jr. English. A. *German. *Mineralogy.	Jr. English. B. *German. Sr. Hebrew. *Mineralogy.	*‡Assaying.
9	Jr. Greek. Con. History. Ment'l Philosophy Animal Biology. El. Mineralogy. *Philosophy. *Pol. Science.	Jr. Greek. Med. History. Moral Philosophy. Sr. Physics. *Philosophy. *Pol. Science.	Jr. Greek. Con. History. Ment'l Philosophy An. Biology. *Philosophy. *Pol. Science. *Mineralogy.	Jr. Greek. Med. History. Moral Philosophy. Sr. Physics. *Philosophy. *Pol. Science.	Jr. Greek. Med. History. Ment'l Philosophy Animal Biology. *Philosophy. *Pol. Science. *Mathematics.	*‡Assaying.
10	Sr. French. Sr. English. A. Economics. Jr. Physics. *Latin. *Italian. *History. *Philosophy. *Geology.	Sr. French. Sr. English. A. Sr. Politics. Sr. Mathemat. Botany. *Latin. *German. *History. *Spanish. *Geology.	Sr. English B. Economics. Jr. Physics. Botany. *Latin. *Italian. *History. *Philosophy. *Mathematics. *Geology.	Sr. French. Sr. Politics. Sr. Mathemat, Botany. *Latin. *German. *History. Biol. Laboratory. *Spanish. *Mineralogy. *Geology.	Sr. French. Economics. Jr. Physics. *Latin. *History. Biol. Laboratory. *Mathematics. *French. *Geology.	*‡Assaying.
11	Sr. Latin. Jr. German. Jr. Chemistry. *English. *Greek. *Mathematics. *Botany. *Geology.	Sr. Latin. Jr. German. Jr. Chemistry. *Anglo-Saxon. *Greek. *Mathematics. *Botany. *Geology.	Sr. Latin. Jr. German. Jr. Prac. Chem. *English. *Greek. *Mineralogy. *Botany. *Geology.	Sr. Latin. Jr. German. Sr. Chemistry. A. *French. *Greek. *Mathematics. *Botany. *Geology.	Sr. Latin. Jr. German. Sr. Chemistry. B. *English. *Greek. *Botany. *Geology.	*‡Assaying.

12	Jr. Latin. Sr. Greek. Sr. German. *French. *Philosophy. *Physics. *An. Biology.	Jr. Latin. Sr. Greek. Sr. German. Jr. English. A. *French. *Sanscrit. *Philosophy. *Physics. *An. Biology.	Jr. Latin. Sr. Greek. Sr. German. *French. *Sanscrit. *Philosophy. *Physics. *An. Biology.	Jr. Latin. Sr. Greek. Sr. German. Jr. English. B. *French. *Philosophy. *Physics. *An. Biology.	Jr. Latin. Sr. Greek. Sr. German. *Latin. *French. *Philosophy. *Philology. *Physics. *An. Biology. Astronomy.	*‡Assaying.
2	Jr. French. Sr. English. B. *Mineralogy.	Jr. French. Sr. English. A. Geology. *Physics. *Chemistry.	Jr. French. Sr. French. Sr. English. A.	Jr. French. Sr. English. B. Geology.	Jr. French. Sr. English. A & B. *English. Blowpipe Analysis.	*‡Assaying.
3	Jr. Mathemat. *Chemistry.	Jr. Hebrew. Jr. English. A. Sr. Chemistry. C. *Physics. *Chemistry.	Jr. Mathemat. *Chemistry.	Jr. Hebrew. Jr. English. B. *Mathematics. *Physics. *Chemistry.	Jr. Hebrew. Jr. Mathemat. *Chemistry.	*‡Assaying.
4	*Mathematics.	*Mathematics.	*Mathematics			*‡Assaying.

*Denotes Honours.
El. Crystallography course of 15 lectures at 1 o'clock, opening of first term.
‡Second term only.

TIME TABLE—THEOLOGY.

HOUR.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	
9	Sr. Hebrew.	*O.T. Criticism	*Ch History. O. T. Criticism	*O.T. Criticism	Sr. Hebrew.	
10	N. T. Criticism	O. T. Criticism	History of Dogma.	O. T. Criticism	N. T. Criticism	
11	Ch. History.	Divinity.	Divinity.	Ch. History.	Ch. History.	
12	Homiletics.	Apologetics.	Apologetics.	Apologetics.	Homiletics.	
3		Eng. Bible. Jr. Hebrew.		Eng. Bible. Jr. Hebrew.	Jr. Hebrew.	

*Denotes Honours.

JUNIOR AND SENIOR MATRICULATION EXAMINATIONS.

SEPTEMBER, 1905.

		9 A.M.	2 P.M.
Thursday,	14th Sept.	—English Composition.	Eng. Literature.
Friday,	15th "	—History.	Euclid.
Saturday,	16th "	—Latin Authors.	Latin Grammar and Composition.
Monday,	18th "	—Physics.	
Tuesday,	19th "	—Arithmetic.	Algebra.
Wednesday,	20th "	—French Authors.	French Grammar & Composition.
Thursday,	21st "	—Greek Authors.	Greek Grammar & Composition.
		German Authors.	German Grammar & Composition.
Friday,	22nd "	—Botany.	Animal Biology.
Saturday,	23rd "	—Chemistry.	English Grammar.

PASS SUPPLEMENTAL EXAMINATIONS.

SEPTEMBER, 1905.

		9 A.M.	2 P.M.
Tuesday,	12th Sept.	—Jr. Latin.	Sr. Latin.
Wednesday,	13th "	—Economics.	Politics.
Thursday,	14th "	—Jr. English.	Sr. English.
Friday,	15th "	—Medieval History.	English Constitutional History.
Saturday,	16th "	—Mental Philosophy.	Moral Philosophy.
Monday,	18th "	—Jr. Physics.	Sr. Physics.
Tuesday,	19th "	—Jr. Mathematics.	Sr. Mathematics.
Wednesday,	20th "	—Mineralogy.	Geology.
		*Jr. French.	**Sr. French.
Thursday,	21st Sept.	—Jr. Greek.	Sr. Greek.
		*Jr. German.	**Sr. German.
Friday,	22nd Sept.	—Botany.	Animal Biology.
Saturday,	23rd "	—Jr. Chemistry.	Sr. Chemistry.
Friday,	24th Oct.	—Jr. Hebrew.	Sr. Hebrew.

*8.30 Dictation. **1.30 Dictation.

PASS EXAMINATIONS.

APRIL, 1906.

ARTS.

		9. A.M.	2 P.M.
Monday,	2nd April.	—*Jr. French.	**Sr. French.
Tuesday,	3rd "	—Jr. Greek.	Sr. Greek.
Wednesday,	4th "	—Jr. English.	Mineralogy.
Thursday,	5th "	—Sr. English.	Geology.
Friday,	6th "	—Economics.	Politics.
Saturday,	7th "	—Jr. Mathematics.	Medieval History.
Monday,	9th "	—Sr. Mathematics.	English Const. Hist'y
Tuesday,	10th "	—Jr. Latin.	Sr. Latin.
Wednesday,	11th "	—Ment. Philosophy.	Moral Philosophy.
Thursday,	12th "	—Jr. Physics.	Sr. Physics.
Saturday,	14th "	—Jr. Chemistry.	Sr. Chemistry.
Monday,	16th "	—Botany.	Animal Biology.
Tuesday,	17th "	—*Jr. German.	**Sr. German.
Wednesday,	18th "	—Jr. Hebrew.	Sr. Hebrew.

THEOLOGY.

		9 A.M.
Wednesday,	11th April.	—Church History.
Thursday,	12th "	—O. T. Criticism.
Saturday,	14th "	—New Testament Criticism.
Monday,	16th "	—Divinity.
Tuesday,	17th "	—Sr. O. T. Criticism.
Wednesday,	18th "	—Apologetics.

Three hours allowed for each paper.

Time Table for Honour Examinations will be issued in March.

*8.30 Dictation. **1.30 Dictation

GENERAL ANNOUNCEMENTS.

QUEEN'S COLLEGE has, under its Royal Charter, "the style and privileges of a University."

The Sixty-fifth Session will open on Wednesday, the 27th of September, 1905.

A compilation of statutes and by-laws containing information for students is published separately. Copies are to be obtained from the Registrar.

BOARDING.—Lists of boarding houses may be obtained from the Registrar. A residence for a limited number of women students has been recently established. Persons desiring information should write to "The Secretary of Woman's Residence, Queen's University, Kingston.

HOSPITAL PRIVILEGES.—The Governors of the Kingston General Hospital agree to give to those students who take out Hospital tickets (cost $1) all the advantages of a private room, including room, board, attendance of nurses in training, and ordinary medicines, when requiring medical or surgical treatment, from October 1st to May 1st. These benefits are conditional on 250 students taking out tickets.

REGISTRATION.—All students are required to have their names entered in the University Register. Before registration they must pay the required fees.

ATTENDANCE AT CHURCH.—All students are expected to attend the churches to which they profess to belong, and produce certificates of attendance from their clergyman when required.

THE LIBRARY contains about 46,000 volumes. Students are entitled to the use of it subject to by-laws.

THE MUSEUM.—The Geological collections, embracing rocks, minerals and fossils, contain the following:

1. The Bell collections, illustrating a north and south stratigraphical section across the Province from Lake Erie 1,000 specimens. Section across the Ottawa river, 500.

2. Specimens of rocks and minerals from various sources, 3,600.

3. Specimens of fossils, 5,000. The rocks and Minerals contributed and collected during late years are deposited in the collections of the School of Mining.

4. The Botanical collection contains 1,200 genera, 3,650 species, and 9,450 sheets of mounted plants. The private herbarium in the museum contains 2,157 genera, 8,654 species, and 14,731 sheets. These include large collections of Tasmanian, Australian, South African, European and Asiatic species. The flora of the British Islands is almost completely represented. A large addition has been recently made to the herbarium.

5. The zoological collection contains: Mammals, 26; birds, 130; fish, 40; invertebrates, about 200 in alcohol and 150 dry; a small collection of reptiles, and another of insects; the mollusca are represented by about 2,600 shells.

ACADEMIC COSTUME.—All graduates and undergraduates when attending class or any college meeting, shall wear the costume prescribed by the University.

Each degree has its distinctive hood, as follows: B.A., black, bordered with red silk; M.A., scarlet; B.Sc., black silk, bordered with yellow silk; D.Sc., black silk, lined with blue silk, bordered with white; M.D., scarlet, bordered with white; B.D., white, bordered with crimson plush; D.D., black silk, lined with white silk; LL.B., blue, bordered with white fur; LL.D., black silk, lined with blue silk; Fh.D., black silk, lined with purple, bordered with white.

FEES.—Graduation and spring examination fees must be paid before March 24th, supplemental examination fees before September 1st; all other fees on or before October 7th.

FEES: (1) FACULTY OF ARTS.

Senior Matriculation Examination		$10 00
Senior Matriculation on *pro tanto* certificate		10 00
Junior Matriculation Examination		5 00
Athletics	per session	2 00
Registration	"	10 00
Class fees	"	25 00
†Any Class except those mentioned below	"	8 00
†Junior Chemistry	"	12 00
†Senior Chemistry	"	12 00
*Pass Examination	"	8 00
*Honour Examination	"	10 00

SPECIAL FEES.

Laboratory—Honour Qualitative Analysis	per session	$15 00
" Honour Quantitative Analysis	"	15 00
" Physics, Pass Course	"	2 00

†These fees apply only to unmatriculated students who do not pay full class fees.

"	Physics, Honour	"	10 00
"	Botany, Pass Course	"	1 00
"	†Botany, Honour Course	"	3 00
"	Animal Biology, Pass Course	"	5 00
"	Animal Biology, Prelimin'y Honours	"	15 00
"	Animal Biology Final Honours	"	10 00
Junior Philosophy (correcting essays)			1 00
Matriculation Certificate			5 00
Certificate of standing			1 00
Graduation—Bachelor of Arts (B.A.)			10 00
"	Master of Arts (M.A.)		20 00
"	Doctor of Philosophy (Ph.D.)		50 00
"	Doctor of Science (D.Sc.)		50 00
Admission ad eundum gradum (B.A)			20 00
" "	statum		10 00

Students taking Physics, Chemistry, Geology or Mineralogy must register in the School of Mining, pay the fee of $1.00 and make a deposit of $5.00.

†Students collecting 200 specimens for their own use will be exempt from this fee.

*Students who have paid the examination fee in April can write on the September examinations on payment of $4.00

Fees: (2) Faculty of Practical Science.

Matriculation Examination (September)		$ 5 00
Registration	per Session	10 00
Athletics	"	2 00
Class Fees—1st Year	"	50 00
" 2nd Year	"	50 00
" 3rd Year	"	50 00
" 4th Year	"	50 00
*Pass Examination	"	8 00

For Students not Paying Class Fees as Above.

Any Class	per session	$12 00
Laboratory—Qualitative Analysis	"	15 00
" Quantitative Analysis	"	15 00
" Mechanical and Engineering	"	20 00
" Honour Practical Physics	"	10 00
" Pass Practical Physics	"	2 00
" Animal Biology, Honour Course	"	12 00
" Animal Biology, Pass Course	"	5 00
" Petrography	per session	$ 5 00
" Assaying	"	5 00
Certificate of standing		1 00
Graduation.—B.Sc		20 00
" M.E		20 00
Admission ad eundum statum		10 00

*Students who have paid the examination fee in April can write on the September examination on payment of $4.00.

Fees: (3) Faculty of Medicine.

Matriculation Examination (October 1st).. ....$5 00

The Sessional Fee, including Classes, Registration, Athletics, Library, Examination, Laboratories, and the required amount of dissection material is $1.00 per session. If paid before October 6th, $95. If not paid before January 10th, $105. Special arrangements will be made with those who do not take the full course of any year.

Special Fees.

Graduation—M.D., C.M.....	$30 00
Fifth year.....	50 00
Supplemental Examinations.....	10 00
Hospital Ticket—Full Course.....	20 00
Hospital Ticket—Single Session.....	7 00
Ad eundum statum.....	10 00
Exclusive use of Microscope per Session.....	5 00

For further information apply to Dr. W. T. Connell, Secretary, Medical Faculty.

Fees: (4) Faculty of Theology.

Registration.....	per session	$ 5 00
Matriculation	"	2 00
Athletics.....	"	2 00
Pass Examination.....	"	3 00
Supplemental Pass Examination.	"	3 00
*B.D. Examination.....	"	6 00

Special Fees.

Testamur.....	$ 2 00
Graduation.—Bachelor of Divinity.....	20 00
Admission ad eundum statum.....	10 00

Fees: (5) Faculty of Law.

Registration	per session	$10 00
Examination.....	"	10 00

Special Fees.

Graduation.—Bachelor of Laws (LL.B.).....	$20 00
Admission ad eundum gradum.....	20 00
Admission ad eundum statum.....	10 00

(6) Agriculture.

For information apply to J. W. Mitchell, B.A., Superintendent of Dairy School.

*Students who have paid the examination fee in April can write on the September examinations on payment of $3.00.

FACULTY OF ARTS.

ARTICLE I.—PASS MATRICULATION.

GENERAL REGULATIONS.

1. The Classes in the University are open to unmatriculated students but candidates for a degree must pass the matriculation examination or an examination accepted by the Senate as equivalent before being admitted to examination on the University courses.

2. Any person presenting a Departmental certificate of matriculation will be admitted as an undergraduate upon paying the registration fee. Any person will be exempt from any part of the Matriculation Examination already passed.

3. Any person presenting a Junior Leaving certificate will be permitted to enter upon a University course in Arts, but he must the first year of his course come up for examination either in the Matriculation work or Junior class work in Latin and must in his first or second year come up for examination either in the Matriculation or Junior class work in one of Greek, French, German.

4. The examination in July will be that conducted for the Universities by the Education Dpartment, known as the Departmental Junior Matriculation Examination. The examination will be held at Queen's University and at the various Collegiate Institutes and High Schools in Ontario. Candidates for this examination, if they propose to write at a Collegiate Institute or High School, must notify the Public School Inspector of their city or county, and pay him the fee before May 23rd, and at the same time send notice to the Uni-

versity Registrar on a form which will be supplied on application. Candidates proposing to write at Queen's University must send the required notice to the Registrar by May 3rd, accompanied by the fee.

5. A second examination will begin at Queen's University on September 15th, 1904. Notice of intention to appear at this examination, together with the fee, must be sent to the Registrar by September 1st, on a form which will be supplied on application. A candidate failing partially in July and desiring to complete the examination in September, and who did not write at Queen's University, must send a copy of the marks obtained in the July examination, certified by the headmaster of the school at which he wrote.

6. The fees for Matriculation are:—Junior Matriculation, $5.00; Supplemental examination, in Junior Matriculation subjects in which the candidate has failed, $2.00 for each subject; total fee not to exceed $5.00. Senior Matriculation $10.00.

7. All Candidates for Junior Matriculation shall take English Composition, English Literature, English Grammar, Algebra, Euclid, Arithmetic, History, British Canadian and Ancient, Latin, and any two of Greek, French, German, Experimental Science, Physics and Chemistry.

8. The percentage for Pass is thirty-three and one-third on each paper. The marks for sight work on each of the "Authors" papers shall not constitute more than thirty-three and one-third per cent. of the whole of the marks for the paper.

9. Candidates who matriculate in any University in the British Empire will be allowed to enter upon a course without further examination. Matriculation Ex-

amination from Universities in other countries will be accepted *pro tanto*.

10. Teachers' examinations are accepted *pro tanto* in

Ontario	Jr. Leaving.
Prince Edward Island	Second Class.
Nova Scotia	Grade XI.
New Brunswick	Second Class.
Quebec	Academy Grade III. University School AA.
Manitoba	Second Class.
North West Territories	Grade VII.
British Columbia	Intermediate.

lieu of the Matriculation Examination, *i.e.*, in so far as the subjects correspond as follows:—

11. In the case of students over the age of 21 the Senate may postpone the Matriculation examination.

12. Junior Leaving certificates will be accepted *pro rata* at the Junior Matriculation examination.

13. Matriculation scholarships will be awarded on the results of the July Departmental Matriculation examination. See article on Matriculation Scholarships.

14. Candidates for scholarships must notify the Registrar not later than May 23rd, stating distinctly where they intend to write, and declaring their intention to enter, if successful, on a course of study in Queen's University.

SUBJECTS OF JUNIOR MATRICULATION.

Greek.

Translation into English of passages from prescribed texts.

Translation at sight (with the aid of vocabularies) of easy Attic prose, to which special importance will be attached.

Grammatical questions on the passages from prescribed texts will be set, and such other questions as arise naturally from the context.

Translation from English into Greek of sentences and of easy narrative passages based upon the prescribed prose texts.

The following are the prescribed texts :—

1906: Selections from Xenophon, Anabasis I., in White's First Greek Book, with the exercises thereon; Homer, Iliad VI.

1907: Selections from Xenophon, Anabasis I., in White's First Greek Book, Herodotus, Tales, ed. Farnell.

Two papers will be set: (1) Prescribed texts and translation at sight; questions on grammar; (2) the translation of English into Greek

Latin.

Translation into Latin of English phrases and easy sentences to illustrate Latin accidence and the common rules of Latin syntax.

Translation into Latin of easy narrative English based upon the first twenty-five chapters of the prescribed Caesar.

Translation at sight (with the aid of vocabularies) from some easy prose author.

Translation from prescribed texts, with grammatical and other questions naturally arising from the extracts set for translation.

The following are the texts prescribed :—

Cornelius Nepos, Lives of Themistocles and Aristides; *Caesar*, Bellum Gallicum, Bk. IV. (omitting Chap. 17), and Bk. V. Chaps. 1-23; *Virgil*, Æneid, Bk. II. (1-505).

Two papers will be set: (1) Translation of English into Latin. (2) Prescribed texts and translation at sight, with questions on grammar, etc.

N.B.—The Roman method of pronouncing Latin is recommended.

English.

Grammar and Rhetoric: The main facts in the development of the language. Etymology and syntax, including the logical structure of the sentence and the inflection, classification and elementary analysis of words. The rhetorical structure of the sentence and paragraph.

One examination paper.

Composition.—An Essay on one of several themes set by the examiners. In order to pass in this subject, legible writing, correct spelling and punctuation, and proper construction of sentences are indispensable. The candidate should also give attention to the structure of the whole essay, the effective ordering of the thought, and the accurate employment of a good English vocabulary. About two pages of foolscap is suggested as the proper length for the essay; but quality, not quantity, will be mainly regarded.

One examination paper.

Literature.—Such questions only shall be set as may serve to test the candidate's familiarity with, and intelligent and appreciative comprehension of, the prescribed texts. The candidate will be expected to have memorized some of the finest passages. In addition to questions on the prescribed selections, others shall be set on a "sight passage" to test the candidate's ability to interpret literature for himself.

One examination paper.

1906. Coleridge: The Ancient Mariner.

Wordsworth: Michael, Influence of Natural Objects, Nutting, Expostulation and Reply, The Tables Turned, The Solitary Reaper, Ode to Duty, Elegiac Stanzas, To the Rev Dr. Wordsworth, "She was a phantom of Delight," To the Cuckoo, The Green Linnet, "Bright Flower! whose home," To a Skylark, ("Ethereal Minstrel, pilgrim of the sky!") Reverie of Poor Susan, To My Sister, "Three years she grew in sun and shade," September, 1819, Upon the Same Occasion.

The following twelve sonnets: "Two Voices are There," "Scorn not the sonnet," "A flock of sheep that leisurely," "Earth hath not anything," "It is not to be thought of," "Fair Star of evening," "O Friend! I know not," "Milton! thou shonld'st," "When I have borne in memory," "Brook, whose society," "Tax not the Royal Saint," "They dreamt not of a perishable home."

Shakespeare: The Merchant of Venice.

1907: Tennyson, Ode to Memory The Dying Swan, The Lotus Eaters, Ulysses, "You ask me, why," "Of old sat Freedom," "Love thou thy land," "Tears, idle tears," and the six interlude songs from The Princess, The Brook, Ode on the Duke of Wellington, Charge of the Light Brigade, Enoch Arden.

Shakespeare: Julius Cæsar.

German.

The candidate's knowledge of German will be tested by : (1) simple questions on Grammar ; (2) the translation of simple passages from English into German ; (3) translation at sight of easy passages from modern German, and (4) an examination on the following texts ;—

Grimm, Rotkäppchen ; *Anderson*, Wie's der Alte macht, Das neue Kleid, Venedig, Rothschild, Der Bär ; *Ertl*, Himmelsschlüssel ; *Frommel*, Das eiserne Kreuz ; *Baumbach*, Nicotiana, Der Goldbaum ; *Heine*, Lorelei, Du bist wie eine Blume ; *Uhland*, Schäfer's Sonntagslied, Das Schloss am Meer ; *Chamisso*, Das Schloss Boncourt ; *Claudius*, Die Sterne, Der Riese Goliath ; *Goethe*, Mignon; Erlkönig, Der Sänger ; *Schiller*, Der Jüngling am Bache.

1906 : *Baumbach*, Waldnovellen.

1907 : *Hauff*, Das Kalte Herz.

Two papers will be set : (1) Prescribed texts and translations at sight ; questions on Grammar; (2) the translation of English into German.

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French.

The candidate's knowledge of French will be tested by : (1) simple questions on Grammar, (2) the translation of simple passages from English into French ; (3) translation at sight of easy passages from modern French, and (4) an examination on the following texts :—

Lamennais, Paroles d'un croyant Chaps. VII and XVII ; *Perrault*, Le Maître Chat, ou le Chat Botté ; *Dumas*, Un nez gelé and la Pipe de Jean Bart ; *Alphonse Daudet*, la Dernière classe, and la Chèvre de M. Seguin ; *Legouvé*, la Patte de dindon ; *Pouvillon*, Hortibus ; *Loti*, Chagrin d'un Vieux forçat ; *Moliere*, l'Avare, Acte III, sc. 5 (Est-ce à votre cocher....sous la mienne) ; *Victor Hugo*, Waterloo, Chap. IX ; *Rouget de L'Isle*, la Marseillaise ; *Arnault*, la Feuille ; *Chateaubriand*, l'Exilé ; *Théophile Gautier*, la Chimère ; *Victor Hugo*, Extase, Lamartine, l'Automne ; De Musset, Tristesse ; *Sully Prudhomme*, le Vase brisé ; *La Fontaine*, le Chêne et le Roseau.

1906 : Labiche, le Voyage de Monsieur Perrichon.

1997 : Labiche, la Grammaire.

Two papers will be set : (1) Prescribed texts and translation at sight ; questions on Grammar; (2) the translation of English into French.

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History.

Great Britain and Canada from 1763 to 1885, with the outlines of the preceding periods of British History.

The geography relating to the history prescribed.

One half examination paper.

General outlines of Greek History to the fall of Corinth.

General outlines of Roman History to the death of Augustus.

The Geography relating to the history prescribed.

One half examination paper.

MATHEMATICS.

Arithmetic: Elementary Rules; Fractions (Vulgar and Decimal), Interest, Discount, and easy problems in Stocks.

Special importance will be attached to accuracy and neatness.

One examination paper.

Algebra.—Elementary rules, highest common measure, lowest common multiple, fractions, square root, simple equations of one, two and three unknown quantities, indices, surds, quadratics of one and two unknown quantities.

One examination paper.

Geometry.—Euclid: Books I, II and III; easy deductions.

One examination paper.

NOTE.—In 1907 the examination in Geometry will be based on a short course in practical Geometry, involving the use of the rule, compass and protractor, and on a course in formal deductive Geometry, which will be defined in a syllabus to be issued by the University.

ELEMENTARY EXPERIMENTAL SCIENCE.

Physics: Use of the metre rule; use of calipers and vernier for more accurate metric measurements (*e.g.*, diameters of wires, thickness of glass, plates, etc.); numerical calculations, in the metric system.

Use of balance.

Specific gravity, by specific gravity bottle and hydrostatic balance, of liquids and of solids.

Boyle's law; barometer; diffusion of gases.

Use of Fahrenheit and centigrade thermometers; determination of zero aud boiling point; boiling point dependent on pressure.

Expansion of solids, liquids and gases, examples.

Specific heat; latent heat; easy numerical examples.

Transmutation of matter; indestructibility of matter.

Solution, precipitation, crystallization and evaporation.

One half examination paper.

Chemistry: Properties of hydrogen, chlorine, oxygen, sulphur nitrogen, carbon and their most important compounds. Nomenclature. Laws of combination of the elements. The atomic theory and molecular theory.

One half examination paper.

ARTICLE II.—SENIOR MATRICULATION.

1. Candidates who intend to pursue an Honour Course in the University are recommended to take the Senior Matriculation (Form IV) in as many subjects as possible.

2. Candidates for Senior Matriculation shall take English, Latin, History, Mathematics, and any two of Greek, French, German, Experimental Science (Physics and Chemistry.)

*3. Candidates who have taken forty per cent. on the Senior Matriculation or Senior Leaving papers in Latin, Greek, French, German, Mathematics, English, Chemistry, Physics, Botany, or Animal Biology, will, on payment of the *pro tanto* fee, not be required to take the University Junior class in the subject. As no student is allowed to pass more than five classes in a session, (see clause 5, article VIII), any one entering under this clause will not be exempt from more than five classes.

4. Any person presenting a Senior Leaving Certificate will be permitted to enter upon a University course, but in his first examination, must include either Junior Latin, Greek, French or German.

*NOTE.—Candidates intending to avail themselves of this clause should write the Deputy Minister of Education, stating where and when they wrote, and have their marks forwarded to the Registrar, who will advise the classes allowed.

SUBJECTS OF SENIOR MATRICULATION.

Greek.

Translation into English of passages from prescribed texts.

Translation at sight of passages of average difficulty, similar to the authors read.

Grammatical questions on the passages from prescribed texts will be set, and such other questions as arise naturally from the context.

Translation into Greek of ordinary narrative passages of English, similar to the authors read.

The following are the prescribed texts :

1906 : Xenophon, Anabasis I (Chaps. I-VIII) ; Homer, Iliad VI, Odyssey XXI ; Lucian, Charon ; Lysias, Contra Eratosthenem.

1907 : Xenophon, Selections in White's First Greek Book ; Herodotus, Tales ed. Farnel; Homer, Odyssey XXI ; Lucian, Timon ; Lysias, Pro Mantitheo and de Invalido.

Two examination papers.

Latin.

Translation into English of passages from prescribed texts.

Translation at sight of passages of average difficulty, similar in style to the authors read.

Grammatical questions on the passages from prescribed texts will be set, and such other questions as arise naturally from the context.

Translation into Latin of easy passages of English, similar in style to the authors read.

The following are the prescribed texts :—

1906 : Cornelius Nepos, Lives of Themistocles and Aristides; Caesar, Bellum Gallicum, Book IV, omitting Chap. 17, and Book V Chaps. 1-23 ; Virgil, Æneid II, lines 1-505 ; Horace, Odes I and II; Cicero, Pro Lege Manilia, Pro Marcello, Philippic XIV (Harper's Text).

1907 : Cornelius Nepos, Lives of Themistocles and Aristides; Cæsar, Bellum Gallicum, Book IV.. omitting Chap. 17, and Book V., Chaps. 1-23 ; Virgil, Æneid II., lines 1-505; ; Horace, Odes III. and IV., Cicero, Pro Lege Manilia, Pro Marcello, Philippic XIV. (Harper's Text.)

Two examination papers.

English.

Composition : An essay, to which special importance will be attached, on one of several themes set by the examiner.

One examination paper.

Literature; The candidate will be expected to have memorized some of the finest passages. Besides questions to test the candidate's familiarty with, and comprehension of, the following selections, questions may also be set to determine within reasonable limits his power of appreciating literary art.

One examination paper.

1906. Coleridge : The Ancient Mariner.

Wordsworth : Michael, Influence of Natural Objects, Nutting, Expostulation and Reply, The Tables Turned, The Solitary Reaper, Ode to Duty, Elegiac Stanzas, To the Rev. Dr. Wordsworth; "She was a Phantom of delight," To the Cuckoo, The Green Linnet, "Bright Flower! whose home," To a Skylark, ("Ethereal Minstrel, pilgrim of the sky"), Reverie of Poor Susan, To my Sister, "Three years she grew," September, 1819, Upon the same Occasion.

The following twelve sonnets: "Two Voices are there," "A flock of sheep that leisurely," "Earth hath not anything," "It is not to be thought of," "Fair Star of evening," "O Friend! I know not," "Milton! thou should'st," "When I have borne in memory," "Brook: whose society," "Scorn not the sonnet," "Tax not the royal Saint," "They dreamt not of a perishable home."

Shakespeare : The Merchant of Venice, Henry V.

1907 : Tennyson, Ode to Memory, The Dying Swan, The Lotus Eaters, Ulysses, "You ask me, why," "Of old sat Freedom," "Love thou thy land," "Tears, idle tears," and the six interlude songs from the Princess, The Brook, Ode on the Duke of Wellington, Charge of the Light Brigade, Enoch Arden.

Shakespeare, Julius Cæsar, Midsummer Night's Dream.

German.

The prescription of work in grammar, the translation of English into German and sight translation is the same for honours as for pass, but the examination will be of a more advanced character.

The following are the prescribed texts :

Grimm, Rotkäppchen; *Anderson*, Wie's der Alte macht, Das neue Kleid, Venedig, Rothschild, Der Bär ; *Ertl*, Himmelsschlüssel; *Frommel*, Das eiserne Kreuz ; *Baumbach*, Nicotiana, Der Goldbaum; *Heine*, Lorelei, Du bist wie eine Blume ; *Uhland*, Schäfer's Sonntagslied, Das Schloss am Meer; *Chamisso*, Das Schloss Boncourt ; *Claudius*, Die Sterne, Der Riese Goliath ; *Goethe*, Mignon, Erlkönig, Der Sänger ; *Schiller*, Der Jüngling am Bache.

1906 : *Baumbach*, Waldnovellen.

Ebner-Eschenbach, Die Freiherren von Gemperlein.

Wilhelmi, Einer muss heiraten.

Benedix, Eigensinn.

1907 : *Hauff*, Das kalte Herz.

Baumbach, Der Schwiegersohn ; ELZ, Er ist nicht eifersüchtig ; *Wichert*, Post Festum.

FRENCH.

The prescription of work in grammar, translation of English into French and sight translation is the same for honours as for pass, but the examination will be of a more advanced character.

The following are the prescribed texts :—

Lamennais, Paroles d'un croyant, Chaps. VII and XVII ; *Perrault*, le Maître Chat ou le Chat Botté ; *Dumas*, Un nez gelé, and la Pipe de Jean Bart ; *Alphonse Daudet*, la Dernière classe, and la Chèvre de M. Seguin ; *Legouvé*, la Patte de dindon ; *Pouvillon*, Hortibus ; *Loti*, Chagrin d'un vieux forçat ; *Molière*, l'Avare, Acte, III, sc. 5 (Est-ce à votre cocher....sous la mienne) ; *Victor Hugo*, Waterloo, Chap. IX ; *Rouget De L'Isle*, la Marseillaise ; *Arnault*, la Feuille ; *Chateaubriand*, l'Exilé ; *Theophile Gautier*, la Chimère ; *Victor Hugo*, Extase ; *Lamartine*, l'Automne ; *De Musset*, Tristesse ; *Sully Prudhomme*, le Vase brisé ; *La Fontaine*, le Chêne et le Roseau.

1906 : LABICHE, Le Voyage de Monsieur Perrichon.

Mérimée, Quatre Contes, ed. by F. C. L. Steenderen, (Holt & Co.)

1907 : LABICHE, la Grammaire.

SAND, la Mare au Diable.

HISTORY.

English history from the discovery of America to 1763.

General outlines of Greek History to the fall of Corinth.

General outlines of Roman history to the death of Augustus.

The geography relating to the history prescribed.

One examination paper.

MATHEMATICS.

Algebra: Elementary rules; highest common measure ; lowest common multiple ; fractions ; square root ; simple equations of one, two and three unknown quantities ; indices, surds, quadratics of one and two unknown quantities ; theory of divisors ; ratio, proportion and variation ; progressions ; notation ; permutations and combinations ; binomial theorem ; interest forms ; annuities.

One examination paper.

Geometry: Euclid, Books I., II., III., IV. and VI. ; definitions of Book V. ; deductions.

One examination paper.

Trigonometry: Trigonometrical ratios with their relations to each other ; sines, etc., of the sum and difference of angles with deduced formulas ; use of logarithms ; solution of triangles ; expressions for the area of triangles ; radii of circumscribed, inscribed and escribed circles.

One examination paper.

Problems: One paper.

NOTE.—In 1907, for the examination in Geometry, an examination in Elementary Analytical Geometry, based on a syllabus to be issued by the University, will be substituted.

Physics.

Mechanics: Measurement of velocity ; uniformly accelerated rectilineal motion ; metre ; units of force, work, energy and power; equilibrium of forces acting at a point ; triangle, parallelogram, and polygon of forces ; parallel forces ; principle of moments; centre of gravity ; laws of friction ; numerical examples.

Hydrostatics: Fluid pressure at a point ; pressure on a horizontal plane ; pressure on an inclined plane ; resultant vertical pressure, and resultant horizontal pressure, when fluid is under air pressure and when not ; transmission of pressure ; Bramah's press ; equilibrium of liquids of unequal density in a bent tube ; the barometer ; air pump ; water pump, common and force ; siphon.

Electricity: Voltaic cells, common kinds ; chemical action in the cell ; magnetic effects of the current ; chemical effects of the current ; voltameters ; electroplating ; astatic and tangent galvanometers ; simple notions of potential ; Ohm's law ; shunts ; measurement of resistance ; electric light, arc and incandescent ; current induction ; induction coil ; dynamo and motor ; the joule and watt ; electric bell ; telegraph ; telephone ; elements of terrestrial magnetism.

One examination paper.

Chemistry.

Chemical Theory: The study of the following elements, with their most characteristic compounds, in illustration of Medelejeff's classification of the elements ; hydrogen ; sodium, potassium ; magnesium, zinc ; calcium, strontium, barium ; boron, aluminium ; carbon, silicon, tin, lead ; nitrogen, phosphorus, arsenic, antimony, bismuth ; oxygen, sulphur ; fluorine, chlorine, bromine, iodine, manganese, iron ; elementary qualitative analysis.

A practical examination will be held in connection with this subject, a pure salt will be sent out for qualitative analysis, and the candidate will be allowed the use of an analytical table.

One examination paper.

Biology.

1. *Elements of Zoology:* Thorough examination of the external form, the gills and the viscera of some common fish. Study of the prepared skeleton of the same. Demonstration of the arrangement of the muscular and nervous systems and the sense-organs, as far as these can be studied without the aid of the microscope.

Comparison of the structure of the frog with that of the fish. The skeleton of the pectoral and pelvic girdles and of the appendages of the frog should be studied, and the chief facts in the development of its spawn until the adult form is attained should be observed.

Examination of the external form of a turtle and a snake.

Examination of the structure of a bird.

Study of the skeleton, and also of the teeth of a cat or dog.

Study of the crayfish as a type of the Arthropods.

Comparison of the crayfish with an insect (grasshopper, cricket or cockroach); also with a millepede and a spider.

Examination of an earthworm.

Study of a fresh water mussel.

The principles of zoological nomenclature as illustrated by some of the common fresh water fish, such as the sucker and herring, bass and perch.

Study of an amæba, or paramœcium as a type unicellular animal.

The modifications of the form of the body in vertebrates in connection with different methods of locomotion. The natural habits of the various animals examined.

2. *Elements of Botany:* The examination will test whether the candidate has practically studied representatives of the flowering plants of the locality in which the preparatory school is situated, and representatives of the chief sub-divisions of cryptogams, such as a fern, a lycopod, a horsetail, a liverwort, a moss, a lichen, a mushroom and a chara.

An elementary knowledge of the microscopic structure of the bean and the maize. Attention will be given in the examination to drawing and description of parts of plants supplied, and to their classification. Comparison of different organs, morphology of root, stem, leaves and hair, parts of the flower, reproduction of flowering plants, pollination, fertilization and the nature of fruit and seeds.

A practical examination will be held in connection with this subject. The material for examination will consist of two plants, a microscopic section and an animal.

Two examination papers.

SYLLABI IN MATHEMATICS FOR 1907.

I.—PASS EXAMINATION.

A.—CONSTRUCTIONS.

To construct a triangle with sides of given lengths.

To construct an angle equal to a given rectilineal angle.

To bisect a given angle.

To bisect a given straight line.

To draw a line perpendicular to a given line from a given point in it.

To draw a line perpendicular to a given line from a given point not in the line.

Locus of a point equidistant from two given lines.

Locus of a point equidistant from two given points.

To draw a line parallel to another, through a given point.

To divide a given line into any number of equal parts.

To describe a parallelogram equal to a given triangle, and having an angle equal to a given angle.

To describe a parallelogram equal to a given rectilineal figure, and having an angle equal to a given angle.

On a given straight line to describe a parallelogram equal to a given triangle, and having an angle equal to a given angle.

To find the centre of a given circle.

From a given point to draw a tangent to a given circle.

On a given straight line to construct a segment of a circle containing an angle equal to a given angle.

From a given circle to cut off a segment containing an angle equal to a given angle.

In a circle to inscribe a triangle equiangular to a given triangle.

To find locus of centres of circles touching two given lines.

To inscribe a circle in a given triangle.

To describe a circle touching three given straight lines.

To decsribe a circle about a given triangle.

About a given circle to describe a triangle equiangular to a given triangle.

To divide a given line similarly to another given divided line.

To find the fourth proportional to three given lines.

To describe a polygon similar to a given polygon, and with the corresponding sides in a given ratio.

To find the mean proportional between two given straight lines.

To construct a polygon similar to a given polygon, and such that their areas are in a given ratio.

To describe a polygon of given shape and size.

B.—Theorems.

The sum of the angles of any triangle is equal to two right angles.

The angles at the base of an isosceles triangle are equal with converse.

If the three sides of one triangle be equal, respectively, to the three sides of another, the triangles are equal in all respects.

If two sides and the included angle of one triangle be equal to two sides and the included angle of another triangle, the triangles are equal in all respects.

If two angles and one side of a triangle be equal to two angles and the corresponding side of another, the triangles are equal in all respects.

If two sides and an angle opposite one of these sides be equal, respectively, in two triangles, the angles opposite the other pair of equal sides are either equal or supplemental.

The sum of the exterior angles of a polygon is four right angles.

The greater side of any triangle has the greater angle opposite it.

The greater angle of any triangle has the greater side opposite it.

If two sides of one triangle be equal, respectively, to two sides of another, that with the greater contained angle has the greater base, with converse.

If a transversal fall on two parallel lines, relations between angles formed, with converse.

Lines which join equal and parallel lines towards the same parts are themselves equal and parallel.

The opposite sides and angles of a parallelogram are equal and the diagonal bisects it.

Parallelograms on the same base, or on equal bases, and between the same parallels are equal.

Triangles on the same base, or on equal bases, and between the same parallels are equal.

Triangles equal in area, and on the same base, are between the same parallels.

If a parallelogram and a triangle be on the same base, and between the same parallels, the parallelogram is double the triangle.

Expressions for area of a parallelogram, and area of a triangle.

The complements of the parallelograms about the diagonal of any parallelogram are equal.

The square on the hypotenuse of a right-angled triangle is equal to the sum of the squares on the sides.

If a straight line be divided into any two parts, the sum of the squares on the parts, together with twice the rectangle contained by the parts, is equal to the square on the whole line.

The square on a side of any triangle is equal to the sum of the squares on the two other sides + twice the rectangle contained by either of these sides and the projection of the other side on it.

If more than two equal straight lines can be drawn from the circumference of a circle to a point within it, that point is the centre.

The diameter is the greatest chord in a circle, and a chord nearer the centre is greater than one more remote. Also the greater chord is nearer the centre than the less.

The angle at the centre of a circle is double the angle at the circumference on the same arc.

The angles in the same segment of a circle are equal, with converse.

The opposite angles of a quadrilateral inscribed in a circle are together equal to two right angles, with converse.

The angle in a semicircle is a right angle; in a segment greater than a semicircle less than a right angle; in a segment less than a semicircle greater than a right angle.

A tangent is perpendicular to the radius to the point of contact; only one tangent can be drawn at a given point; the perpendicular to the tangent at the point of contact passes through the centre; the perpendicular from centre on tangent passes through the point of contact.

If two circles touch, the line joining the centres passes through the point of contact.

The angles which a chord drawn from the point of contact makes with the tangent, are equal to the angles in the alternate segments.

The rectangles under the segments of intersecting chords are equal.

If $OA.OB. = OC^2$, OC is a tangent to the circle through A, B and C.

Triangles of the same altitude are as their bases.

A line parallel to the base of a triangle divides the sides proportionally, with converse.

If the vertical angle of a triangle be bisected, the bisector divides the base into segments that are as the sides, with converse.

The analogous proposition when the exterior angle at the vertex is bisected, with converse.

If two triangles are equiangular, the sides are proportional.

If the sides of two triangles are proportional, the triangles are equiangular.

If the sides of two triangles about equal angles are proportional, the triangles are equiangular.

If two triangles have an angle in each equal, and the sides about two other angles proportional, the remaining angles are equal or supplemental.

Similar triangles are as the squares on corresponding sides.

The perpendicular from the right angle of a right-angled triangle on the hypotenuse divides the triangle into two which are similar to the original triangle.

In equal circles angles, whether at the centres or circumferences, are proportional to the arcs on which they stand.

The areas of two similar polygons are as the squares on corresponding sides.

If three lines be proportional, the first is to the third as the figure on the first to the similar figure on the second.

Questions and easy deductions on the preceding constructions and theorems.

It is recommended that the study of formal demonstrative Geometry be preceded by a course in Practical Geometry, extending over not more than a year, and embracing the following:—

Definitions; fundamental geometric conceptions and principles; use of simple instruments, as compasses, protractor, graded rule, etc:; measurement of lines and angles, and construction of lines and angles of given numerical magnitude; accurate construction of figures; some leading propositions in plane geometry reached by induction as a result of accurate construction of figures; deduction also employed as principles are reached and assured. At the examination questions may be given in Practical Geometry, the constructions being such as naturally spring from the prescribed course. Candidates must provide themselves with a graduated ruler, compasses, set-square and protractor.

In the formal deductive Geometry modifications of Euclid's treatment of the subject will be allowed, though not required as follows:—

The employment of the "hypothetical construction."

The free employment of the method of superposition, including the rotation of figures about an axis, or about a point in a plane.

A modfication of Euclid's parallel postulate.

A treatment of ratio and proportion restricted to the case in which the compared magnitudes are commensurable.

II.—HONOUR EXAMINATION.

A.

Exercises on the course prescribed for the Pass Examination, with special reference to the following topics—Loci; Maxima and Minima; The System of Inscribed, Escribed and Circumscribed Circles of a Triangle, with metrical relations; Radical Axis.

B.

The following additional propositions in Synthetic Geometry, with exercises thereon:—

To divide a given straight line internally and externally in medial section.

To describe a square that shall be equal to a given rectilineal figure.

To describe an isosceles triangle having each of the angles at the base double of the third angle.

To inscribe a regular pentagon in a given circle.

The squares on two sides of a triangle are together equal to twice the square on half the third side and twice the square on the median to that side.

If A B C be a triangle, and A be joined to a point P of the base such that B P : P C = m : n, then $n \cdot A B^2 + m \cdot A C^2 = (m+n) \cdot A P^2 + n \cdot B P^2 + m \cdot P C^2$.

In a right-angled triangle the rectilineal figure described on the hypotenuse is equal to the sum of the similar and similarly described figures on the two other sides.

If the vertical angle of a triangle be bisected by a straight line which also cuts the base, the rectangle contained by the sides of the triangle is equal to the rectangle contained by the segments of the base, together with the square on the straight line which bisects the angle.

If from the vertical angle of a triangle a straight line be drawn perpendicular to the base, the rectangle contained by the sides of the triangle is equal to the rectangle contained by the perpendicular and the diameter of the circle described about the triangle.

The rectangle contained by the diagonals of a quadrilateral inscribed in a circle is equal to the sum of the two rectangles contained by its opposite sides.

Two similar polygons may be so placed that the lines joining corresponding points are concurrent..

If a straight line meet the sides B C, C A, A B, of a triangle A B C in D, E, F respectively, then B D. C E. A F = D C. E A. F B, and conversely. (Menelaus' Thorem.)

If straight lines through the angular points A, B, C of a triangle are concurrent, and intersect the opposite sides in D, E, F, respectively, then, B D. C E. A F = D C. E A. F B, and conversely. (Ceva's Theorem.)

If a point A lie on the polar of a point B with respect to a circle, then B lies on polar of A.

Any straight line which passes through a fixed point is cut harmonically by the point, any circle, and the polar of the point with respect to the clrcle.

In a complete quadrilateral each diagonal is divided harmonically by the other two diagonals, and the angular points through which it passes.

C.—Elementary Analytical Geometry.

Axes of co-ordinates. Position of a point in plane of reference.

Transformation of co-ordinates,—origin changed, or axes (rectangular) turned through a given angle.

$\pm 2A = x_1(y_2 - y_3) + \ldots + \ldots$.

Co-ordinates of point dividing line joining $P_1(x_1, y_1)$ and $P_2(x_2, y_2)$ in ratio $m : n$ are

$$x = \frac{m x_2 + n x_1}{m+n}, \quad y = \frac{m y_2 + n y_1}{m+n}.$$

$(P_1 P_2)^2 = (x_1 - x_2)^2 + (y_1 - y_2)^2$

Equations of straight lines.

$$\left.\begin{array}{l} \dfrac{x - x_1}{x_1 - x_2} = \dfrac{y - y_1}{y_1 - y_2} \\ \dfrac{x}{a} + \dfrac{y}{b} = 1 \end{array}\right\} \text{Line defined by two points through which it passes}$$

$$\left.\begin{array}{l} \dfrac{x-a}{\cos\theta} = \dfrac{y-b}{\sin\theta} = r. \\ y = m x + b. \\ y = m(x - a.) \\ x\cos\alpha + y\sin\alpha = p. \end{array}\right\} \text{Line defined by one point through which it passes, and by its direction.}$$

General equation of 1st degree, $Ax + By + C = 0$, represents a straight line.

Any line through (x_1, y_1) is

$$A(x - x_1) + B(y - y_1) = 0.$$

If θ be angle between $Ax + By + C = 0$ and $A'x + B'y + C' = 0$, then

$$\cos\theta = \frac{A A' + B B'}{\sqrt{A^2 + B^2}\ \sqrt{A'^2 + B'^2}}$$

Condition of $\perp$ rity, $A A' + B B' = 0$.

Condition of $\parallel$ ism, $\dfrac{A}{A'} = \dfrac{B}{B'}$.

Distances from (a, b) to $Ax + By + C = 0$, in direction whose direction cosines are (l, m) is

$$\frac{Aa + Bb + C}{Al + Bm}.$$

| r distance from $(a\ b)$ on $Ax + By + C = 0$

$$= \frac{Aa + Bb + C}{\sqrt{A^2 + B^2}}.$$

THE CIRCLE—

Equations in form:

$$x^2 + y^2 = r^2.$$
$$(x - a)^2 + (y - b)^2 = r^2.$$
$$y^2 = 2rx - x^2.$$

General equation $x^2 + y^2 + 2Ax + 2By + C = 0$,
or $(x + A)^2 + (y + B)^2 = A^2 + B^2 - C$,
represents a circle with centre $(-A, -B)$.and radius

$$\sqrt{A^2 + B^2 - C}.$$

Tangent at (x', y') *to* $x^2 + y^2 = r^2$, is $xx' + yy' = r^2$.

Normal is $\frac{x}{x'} = \frac{y}{y'}$.

Tangent in form.

$$y = mx \pm r\sqrt{1 + m^2}.$$

Pole being (x', y'), polar is $xx' + yy' = r^2$.

If pole move along a line, polar turns about pole of that line.

Length of tangent from

(x', y') *to* $x^2 + y^2 + 2Ax + 2By + C = 0$
is $x'^2 + y'^2 + 2Ax' + 2By' + C$.

Radical axis of

$$x^2 + y^2 + 2Ax + 2By + C = 0$$
$$x^2 + y^2 + 2A'x + 2B'y + C' = 0$$

Easy exercises on the preceding propositions.

ARTICLE III.—ARTS MATRICULATION SCHOLARSHIPS, 1905.

A Scholarship cannot be held without attendance on the University classes. To be eligible for free tuition in the remaining sessions of his course the scholar must pass his annual examinations to the satisfaction of the Senate. To hold a Scholarship a candidate must be fully matriculated.*

I.—The following Scholarships, of the values specified, are awarded on the July Departmental Senior Matriculation (Upper School) examinations.

Candidates for Senior Matriculation Scholarships must take Honours in the department or departments specified in connection with the Scholarships.

Name and Source of Money.	*Free Tuition.*	*Total Value.*	*Subjects.*
1. PRINCE OF WALES. $60. Founded by H. M. King Edward VII.	$100	$160	Mathematics, Chemistry, and Physics.
2. GOVERNOR-GENERAL. $75. Given by his Excellency the Earl of Minto, LL.D.	100	175	Classics.
3. CHANCELLOR. $100. Founded by Sir Sandford Fleming, K.C.M.G., Chancellor	100	200	Mathematics.
4. MACKERRAS MEMORIAL. $70. Founded in memory of the late Prof. Mackerras	100	170	Classics.
5. WILLIAMSON No. 1. $65. Founded in memory of the late Vice-Principal, Rev. Dr. James Williamson.	100	165	English and History.
6. WILLIAMSON No. 2. $60. Founded in memory of the late Vice-Principal, Rev. Dr. James Williamson.	100	160	French and German.

ARTICLE III.—ARTS MATRICULATION SCHOLARSHIPS, 1905.—(Continued.)

Name and Source of Money.	*Free Tuition.*	*Total Value.*	*Subjects.*
7. LEITCH MEMORIAL No. 1. $60. Founded in memory of the late Principal Leitch..	$100	$160	English, Chemistry, and Physics or Botany.
8. NICHOLLS FOUNDATION No. 1. $50. Founded by the late Charlotte Nicholls, of Peterboro.....	100	150	English, French and German.
9. MAYOR. $50. Given by the Mayor of Kingston...	100	150	Latin, French and German.
10. MOWAT. $50. Founded by the late John Mowat, Esq., of Kingston	100	150	Mathematics
11. FORBES MCHARDY. $25. Founded by the late Forbes McHardy, Esq., Toronto..	100	125	Mathematics, French and German.

II.—The following Scholarships, of the values specified, are awarded on the July Departmental Junior Matriculation (Middle School) examinations.

Name and Source of Money.	*Free Tuition.*	*Total Value.*	*Subjects.*
1. NICHOLLS FOUNDATION No. 2. $30. Founded by the late Charlotte Nicholls, Peterboro..	$100	$130	General proficiency.
2. KINGSTON. $25. Given by the Hon. Wm. Harty, M.P. for Kingston.....	100	125	Do.
3. NICHOLLS FOUNDATION No. 3. $20. Founded by the late Charlotte Nicholls, Peterboro.....	100	120	Do.

ARTICLE III.—ARTS MATRICULATION SCHOLARSHIPS, 1905.—(Continued)

III.—The following Scholarships have been endowed under special conditions.

Name and Source of Money.	*Free Tuition.*	*Total Value.*	*Subjects.*
1. WATKINS. $60. Founded by the late John Watkins, Esq., Kingston	$100	$160	Given to the student of the Kingston Collegiate Institute who stands highest in the Form IV. examinations.
2. MCLENNAN GLENGARRY FOUNDATION. $50 a year for four years. Founded by R. R. McLennan, Esq., Alexandria	100	300	General Proficiency. Given only to candidates of one of the High Schools of the County of Glengarry.
3. MARION STEWART MCDONALD. $75. Founded by John S. McDonald, Esq., Fond du Lac, Wis.		75	General Proficiency. Given only to candidates from the County of Glengarry.

Notice of intention to compete for Scholarships must be sent to the Registrar before May 23rd, 1905, on a form which will be supplied on application.

*Candidates who wish to present certificates for any part of Matriculation will forward them with the notice

ART. IV. UNIVERSITY PRIZES, MEDALS AND SCHOLARSHIPS.

SPECIAL SCHOLARSHIPS.

THE RHODES SCHOLARSHIP.

Queen's University will in 1908 select a candidate for the Rhodes Scholarship, value £300 a year, tenable for three years. The elected scholar will commence residence at Oxford in October, 1908.

The scholar shall have reached at least the end of his sophomore or second year work at Queen's University. Candidates must be unmarried, must be British citizens, and must be between 19 and 25 years of age.

EXHIBITION OF 1851, SCIENCE RESEARCH SCHOLARSHIP.

This scholarship, of the annual value of £150 stg., is awarded by Her Majesty's Commissioners for the Exhibition of 1851 to students who have given evidence of capacity for original research, and (except in very special circumstances) are under 30 years of age.

The nominee must be a British subject, must have been a *bona fide* student of this University for three years, must have been a student of this University for a full year immediately before his nomination, must be a student of this University at the time of his nomination, (or he must have been a student at this University for a full year ending within twelve months prior to his nomination and since ceasing to be such student must have been engaged solely in scientific study) and must pledge himself not to hold any position of emolument whilst holding the scholarship. He is recommended to the Commissioners by the Senate of the University. The scholarship may be held for a second year. if the report of the first year's work be satisfactory to the Commissioners. The scholar will in the absence of special circumstances, be required to proceed to an institution other than that by which he is nominated, and there pursue some investigation likely to promote technical industries or scientific culture. The particular investigation the student proposes to pursue must be stated before a scholarship can be awarded.

The next recommendation will be made by the Senate in April, 1907.

Science Research Scholars recommended by Queen's University:—

Norman R. Carmichael, M.A., 1894-95.
Thomas L. Walker, M.A., 1896-97.
Frederick J. Pope, M.A., 1898-99.
Wm. C. Baker, M.A., 1900.
C. W. Dickson, M.A., 1901-03.
C. W. Knight, B.Sc., 1904.

PRIZES.

These are prizes for literary articles, essays, etc., as specified under each particular prize, and are open to students of the present or preceding session.

CONDITIONS OF COMPETITION.—1. Competitive papers must be given to the Registrar not later than 21st of March.

2. Each paper is to bear a motto, instead of the author's name and must have attached to it a sealed envelope, bearing the same motto and containing a written declaration over the author's signature, to the effect that it is his unaided composition.

3. The envelope attached to successful papers shall be opened and the writer's name made known at the Convocation at the close of the session.

4. The best productions must be reported by the examiners to be of sufficient merit.

5. All successful productions shall be the property of the University, and be at the disposal of the Senate.

A.—LEWIS.

Value $25. Given for the best lecture on Luke XV. 3–7.

B.—GOWAN FOUNDATION NO. I.

Value $25. Given by the Honourable Senator Gowan, C.M.G., LL.D., for the best essay on "Municipal Ownership of Public Utilities."

C.—GOWAN FOUNDATION NO II.

Value $25. Given by the Honourable Senator Gowan, C.M.G., LL.D., for "The best Collection of Canadian Plants." The collection must be delivered before the 15th of December.

D.—GOWAN FOUNDATION NO III.

Value $25 in Books. Given by the Honourable Senator Gowan, C.M.G., LL.D., Given in Honours in Political Science.

E.—LATIN AND GREEK COMPOSITION.

Two prizes, each of the value of $10 in books, are offered for competition for the best composition in Latin and Greek prose respectively. Subjects for composition, 1904-1905; Latin prose, Merivale's General History of Rome, c. XXII. "The fortune of war ....than the Roman himself." Greek prose, Sargent and Dallin's Materials and Models for Greek Prose Composition, Part VI, Nos. 123, 124, 125, 126; pp. 275-278.

F.—SPECIAL FRENCH AND GERMAN PRIZES.

Two prizes, each of the value of $10 in books, are offered for the best examination in April in Senior French and Senior German respectively.

SCHOLARSHIPS IN ARTS AND PRACTICAL SCIENCE.

1.—THE CHANCELLOR'S PRACTICAL SCIENCE SCHOLARSHIP.

Value $70. Given by Sir Sandford Fleming, C.E., K.C.M.G., LL.D., Chancellor of the University. Awarded to the Practical Science student passing the best examination at the end of first year.

2.—SCHOLARSHIP IN CHEMISTRY.

Value $50. Given by a graduate in Chemistry. Awarded annually to the student of any faculty who makes the best marks on an examination set, in April, upon the curriculum of the senior Chemistry class. Candidates may have previously taken Preliminary Honour Chemistry. The holder of this Scholarship must proceed with the course in Honour Chemistry.

3.—NEW YORK QUEEN'S ALUMNI SCHOLARSHIP IN BIOLOGY.

Value $50. Given by the New York Queen's University Society and awarded to the student in Arts or Medicine who obtains the highest number of marks in the honour examination in physiology and histology.

4.—THE ANN ELIZA STAFFORD SCHOLARSHIP IN ANIMAL BIOLOGY.

Value $40. Founded by T. T. Bower, Esq., Toronto. Awarded to a graduate in first-class honours in Animal Biology who is competent to undertake research work in physiology. The holder must be willing to devote himself exclusively to research and must carry on his investigations in the University laboratories for at least one year from the date of his appointment.

5.—THE M. C. CAMERON SCHOLARSHIP IN GAELIC.

Value $40. Founded by the late M. C. Cameron, M.P., Goderich. Awarded to the best Gaelic scholar, reader and speaker. The examination takes place after the September Matriculation examination. Work prescribed: Ossian's Fingal, Duncan Ban MacIntyre's Poems, Blackie's Language and Literature of the Scottish Highlands. Translation at sight of Gaelic into English and English into Gaelic. This Scholarship will not be awarded to any candidate who does not take at least 50 per cent. of the total number of marks in the examination.

6.—THE HIRAM CALVIN SCHOLARSHIP IN LATIN.

Value $25. Given by Hiram Calvin, M.P., Kingston, to encourage the study of Latin in the University. Awarded on the result of the April examinations in Senior Latin, to the best student who is proceeding to the Honour Course in Latin. Not to be held by any student unless in actual attendance. Not necessarily to be awarded, unless a certain degree of merit is shown.

7.—THE MACLENNAN SCHOLARSHIP IN GREEK.

Value $25. Given by Hon. Justice Maclennan, LL.D., Toronto, to encourage the study of Greek in the University. Awarded on the results of the April examinations in Senior Greek to the best student who is proceeding to the Honour Course in Greek. Not to be held by any student unless in actual attendance, and not necessarily to be awarded unless a certain degree of merit is shown.

8.—THE '01 FELLOWSHIP IN ENGLISH.

This Fellowship was established by the Class which graduated in 1901. It was awarded by the Senate to the student who is to act as Assistant Tutor in English during the following session.

MEDALS.

University medals will be awarded to the Candidates who obtain the highest nnmber of marks in the Honour courses leading to the degree of M.A.

Candidates for medals will be required at the final examination to take all the Honour papers in the work of the courses which they select. No medal will be awarded to any candidate who fails to obtain three-fourths of the whole number of marks.

SCHOLARSHIPS IN THEOLOGY.

I.—MATRICULATION SCHOLARSHIPS.

1.—DAVID STRATHERN DOW

Founded in 1886 by David Strathern Dow, Esq., Whitby, Ont. Value $75.

2.—BUCHAN NO. 1.

Founded in 1875 by the late Rev. Alexander Buchan, Stirling, Ont. Value $65.

3.—BUCHAN NO. 2.

Founded by the late Rev. A. Buchan. Value $55

4.—DOMINION.

Founded in 1870 by the late Walter Lawson, Scotland. Value $70.

5.—BUCHAN NO. 3.

Founded by the late Rev. A. Buchan. Value $45.

6.—M'INTYRE.

Founded in 1876 by Mrs. Margaret W. McIntyre, Perth, Ontario. Value $20.

II.—SCHOLARSHIPS AWARDED AT CLOSE OF SESSION.

1.—SARAH M'CLELLAND WADDELL MEMORIAL.

Founded in 1899, by Hugh Waddell, Esq., South Monaghan, Ont., in memory of his mother, Sarah McClelland. Value $120. Awarded upon the Sessional Examination at the close of the first year in divinity, Old and New Testament Exegesis, Church History and Elocution.

2.—THE CHANCELLOR'S.

Awarded to the student of the second year who takes the highest standing in the Sessional Examinations.

3.—SPENCE.

Founded in 1879, by the late Rev. Alex. Spence, D.D., formerly minister of St. Andrew's Church, Ottawa. Value $60. Awarded upon the Sessional Examination at the close of the first year in Divinity, Old and New Testament Exegesis, and Apologetics, or Hebrew. Tenable during second or third year in Theology.

4.—LEITCH MEMORIAL NO. 2.

Founded in 1867, in memory of the late Principal Leitch, by subscribers in Scotland and Canada. Value $80. Awarded upon a Sessional Examination, and tenable during three successive years, should the successful candidate, after the completion of his Theological curriculum at this University, continue his studies at this or any European University. Candidates must have the degree of B.A. The next competition will take place in 1906. Subjects of examination: The Epistles to the Romans and Hebrews in Greek, Psalms I-XXV in Hebrew, Butler's Analogy, and the Divinity Lectures of the session.

5.—ANDERSON NO. 1.

Founded by the late Robert Anderson, Esq., Montreal. Value $40. Awarded in first year Divinity.

6.—ANDERSON NO. 2.

Founded by the late Robert Anderson, Esq. Value $35. Awarded in second year Divinity.

7.—THE TAWSE.

Founded by Miss Tawse, King, Ont. Value $40. Awarded in third year Divinity.

8.—TORONTO.

Founded by the Ladies' Association of St. Andrew's Church, Toronto. Value $60. Awarded in second year Hebrew.

9.—ST. ANDREW'S CHURCH, TORONTO.

Given by the Session of St. Andrew's Church, Toronto, Value $45. Awarded in Old Testament Exegesis.

10.—RANKINE NO. 1.

Founded in 1881, by the late Alexander Rankine, Esq., Leamington, England. Value $45. Awarded in Apologetics.

11.—RANKINE NO. 2.

Founded by the late Alexander Rankine, Esq., Leamington, England. Value $45. Awarded in New Testament Exegesis.

12.—GLASS MEMORIAL.

Founded in memory of the late Henry Glass, Esq., of Sarnia, by his widow. Value $30. Awarded in Church History.

13.—MACKIE.

Given by the Rev. John Mackie, M.A., D.D., St. Andrew's Church, Kingston, for the best essay on Ecclesiasticus or The Wisdom of Jesus, the son of Siroch; the nature of the book, and its place in Jewish Histoty. Essays to be handed in not later than Feb. 15th, 1905. For rules of competition see under prizes. Value $25 in books. May be taken by a student holding another scholarship.

14.—JAMES ANDERSON BURSARY.

Founded by the late James Anderson, Acton, Ont. Value $25. Awarded by the Senate to a student who can preach in Gaelic.

15.—WILLIAM MORRIS BURSARY.

Founded by the late Hon. Alexander Morris, in memory of his father. Value $50. Awarded by the Senate to a Divinity student taking a post-graduate course in the University.

PRIZES AND SCHOLARSHIPS IN MEDICINE.

1. The Dr. Hayunga Prize for the best dissection of an upper extremity. This prize consists of some standard work on Surgery, and is open to all students in Medicine.

2. At the end of the second session :

A prize of $25.00 to be awarded to the student making the highest number of marks on this year's examination in Anatomy, Physiology, Histology and Chemistry, Theoretical and Practical.

3. The New York Alumni Association Scholarship of $50.00. Awarded to the student making the highest marks in honour Physiology and Histology papers of the Arts course. Open also to Arts students in Honour Animal Biology.

4. At the end of the second session :

Some standard work on Medicine (value $10), presented by Dr. Geo. Hayunga, of New York, will be awarded to the student making the highest percentage of marks on the year's examination in Materia Medica, Therapeutics and Pharmacy.

5. At the end of the third session :

The Dean Fowler Scholarship. Value $50.00.

This Scholarship will be awarded to the student making the highest percentage of marks on the examinations of the year, and will be enjoyed by the successful candidate during his fourth session.

6. The Dr. McCabe prize of a standard work on Pathology, for the best written and practical examination on Pathology.

7. At the end of the fourth session :

The Chancellor's Scholarship of $70.00.

This Scholarship is open to students who take the examinations of the Ontario Medical Council, and is tenable only on condition that during the following year the winner pursues the studies of the fifth session at Queen's as prescribed in the Calendar, or studies in Europe for a like period.

This Scholarship will be awarded to the student who has made the highest number of marks on all examinations for the four years' course.

8. A University Medal to the student making the highest number of marks in the examinations in Practice of Medicine, Clinical Medicine, Pathology, Bacteriology, Sanitary Science and Jurisprudence.

9. A University Medal to the student making the highest number of marks in Surgery, Clinical Surgery, Obstetrics and Gynæcology, Medical and Surgical Anatomy.

10-12. Three House Surgeoncies at the Kingston General Hospital, of twelve months each, are to be awarded to the three students making the highest percentages on the examinations of the fourth year. Candidates for these positions must have passed all previous examinations. These appointments must be approved by the Board of Governors of the Kingston General Hospital.

A House Surgeoncy and the Chancellor's Scholarship cannot be held by the same student, but a student winning both may elect which he will hold.

13. A prize of $25.00, given by Dr. C. K. Clarke, to the fourth year student passing the best examination on the subject of Mental Diseases.

14. A prize of a standard work, given by Dr. D. E. Mundell, for the best examination in Medical and Surgical Anatomy.

15. Two Clinical Assistants are appointed to the staff of the Rockwood Hospital for the Insane to work during the summer. Applications must be made to Dr. C. K. Clarke, Supt., by whom the appointments are determined, regard being had to the special qualifications necessary for such work.

ARTICLE V.—TEACHERS' CERTIFICATE.

1. Teachers Certificates which are of sufficiently recent date will be accepted *pro tanto*.

2. Second Form Primary Public School Leaving, or Part I Junior Leaving certificates will be accepted as the equuivalent of Part I Matriculation, and Second Class and Part II Junior Leaving certificates for Part II Junior Matriculation, so far as the subjects correspond.

3. Any person presenting a Junior Leaving certificate will be permitted to enter upon a University course in Arts, but he must the first year of his course come up fo examination either in the Matriculation work or Junior class work in Latin and must in his first or second year come up for examination either in the Matriculation or Junior class work in one of Greek, French, German.

4. First Class Senior Leaving, or Form IV certificates of Ontario will be accepted for Senior Matriculation so far as they cover the subjects of matriculation.

5. Any person presenting a Senior Leaving certificate of Ontario will be permitted to enter upon a University course, but with his first examination must include either Junior Latin, Greek, French or German.

*6 Candidates who have taken forty per cent. on the Senior Matriculation or Senior Leaving papers in Latin, Greek, French, German, Mathematics, English Chemistry, Physics, Botany, or Animal Biology, will, on payment of the *pro tanto* fee not be required to take the University Junior Class in the subject. As no student is allowed to pass more than five classes in a session (see clause 5, article VIII), any one entering under this clause will not be exempt from more than five classes. Students who are allowed four classes may complete their course within three years.

7. Certificates from the different provinces will be accepted for the Junior Leaving and Senior Leaving certificates of Ontario as follows:—

Ontario	Jr. Leaving	Sr. Leaving.
Prince Edward Island	Second Class	First Class.
Nova Scotia	Grade XI	Grade XII.
New Brunswick	Second Class	First Class.
Quebec	Academy Grade III. / University School AA.	
Manitoba	Second Class	First Class.
North-west Territories	Grade VII	Grade VIII.
British Columbia	Intermediate	Senior Academic

ARTICLE VI.—EXTRA-MURAL STUDENTS.

1. The Senate allows extra-mural students to enter upon the work of the Pass or Honour courses, and to present themselves for examination without attendance upon classes; but candidates for a degree must, before being registered, pass the Matriculation, or an examination accepted by the Senate as equivalent.

*Note—Candidates intending to avail themselves of this clause should write the Deputy Minister of Education, stating when and where they wrote, and have their marks forwarded to the Registrar, who will advise them the classes allowed.

2. Extra-mural students must register and pay the registration fee of $10 and the tutorial fees, if any, before October 1st. The Registrar will then send them registration cards, and forward cards in the subjects upon which they propose to be examined the following April or September, to the Professors of the respective classes.

3. Extra-mural students must write the essays and exercises prescribed and send them to the Professors or Tutors of the subjects at the dates specified. For information regarding essays and exercises, and the fees to be paid to the Registrar for assistance by tutors appointed by the Professors and acting under their supervision, see the sections concerning extra-mural students in "Subjects of study for B.A. and M.A."

4. List of centres where extra-mural examinations are held may be had on application to the Registrar. If for special reasons a candidate is unable to write at one of these, a new centre may be established on payment of a fee of $5.00.

In all cases the examination fee must be paid in advance by the candidates, and in addition a fee of $1.00 for each local half-day examination by students writing away from the University.

5. Students must make application to the Registrar, at least three weeks before the beginning of the University examinations in April and September, for the papers on the particular subjects, as laid down in the Calendar, upon which they propose to write.

6. Oral examinations in final Honour Moderns and Practical examinations in Science must be taken at the University.

ARTICLE VII.—PERCENTAGE REQUIRED.

To take Pass Standing, 40 per cent.
To take Third Class Honours, 50 per cent.
To take Second Class Honours, 66 per cent.
To take First Class Honours, 75 per cent.

ARTICLE VIII.—PASS COURSES LEADING TO DEGREE OF B.A.

1. The course after Matriculation extends over four sessions, but students who are allowed four classes (see Clause 6, Art. V) may complete their course in three years.

2. Pass and Honour examinations are held annually in April and Pass Examinations in September also.

3. The degree of B.A. will be conferred on candidates who take—

(*a*) Pass standing in the Pass classes and second or third class Honours in the Honour classes of any of the Honour courses, or

(*b*) Pass standing in the Pass classes and at least third class Honours in the Honour classes in either of the following pass courses:

COURSE I.

A.—(1) Junior and Senior Latin.
(2) Junior and Senior Greek. *(a)*
(3) Junior and Senior French.
(4) Junior and Senior German.
} Any one.

B.—(1) Junior and Senior English.
(2) Mental and Moral Philosophy.
(3) Mediaeval History or Economics.
(4) Junior Mathematics.

C.—Any two of Junior Physics, Junior Chemistry, Botany, Animal Biology, Mineralogy, Geology, Junior Hebrew.

D.—Any two of the following:

(1) Any two not taken under B, of Mediaeval History, English Constitutional History, Economics, Politics.
(2) Junior and Senior Greek.*
(3) Junior and Senior French.*
(4) Junior and Senior German.*
(5) Senior Hebrew.
(6), (7) Any two of Senior Mathematics, Senior Physics, Senior Chemistry and the classes not taken in C.
(8), (9) Preliminary Honours (at least third class) in either Latin, Greek, French, German, History, Philosophy, Political Science, Physics, Botany, Animal Biology, Chemistry, Mineralogy or Geology.
(10) Intermediate Honours (at least third class) in English.
(11) Honours in Mathematics as specified under Honour Mathematics.

(12) Final Honours (at least second class) in any class in (8), (10), (11).

*Only for those who have not taken them.

(a) Students taking Greek will be required to take only one of the classes in C.

COURSE II.

A.—1. Junior Latin,
2. Junior Greek,
3. Jnnior French,
4. Junior German.
} Any two.

B.—1. Junior and Senior English.
2. Mental and Moral Philosophy.
3. Junior and Senior Mathematics.
4. Junior Physics.
5. Junior Chemistry.

C.—Any two of: Botany, Animal Biology Mineralogy, Geology, Senior Chemistry, Senior Physics.

D.—Any four of the following:—
(1) Senior Latin.
(2) Senior Greek.
(3) Senior French.
(4) Senior German.
(5) Junior Hebrew.
(6) Mediaeval and English Constitutional History.
(7) Economics and Politics.
(8) Moral Philosophy.
(9), (10) Any other two of those in C.
(11), (12), (13), (14) Preliminary Honours (at least third class) in either Latin, Greek, French, German, History, Philosophy, Political Science, Physics, Botany, Animal Biology, Chemistry, Mineralogy or Geology.
(15) Intermediate Honours (at least third class) in English.
(16) Honours in Mathematics as specified under Honour Mathematics.
(17) Final Honours (at least second class) in any class in (11), (15) or (16).

COURSE III.

Course for B.A. leading to the Degrees of B.A. and M.D. in six years.

A. —1. Junior Latin
2. Junior Greek.
3. Junior French.
4. Junior German.
} Any two.

B.—1. Junior and Senior English.
2. Mental and Moral Philosophy.
3. Junior Mathematics.

C.—1. Junior Physics and Junior Chemistry.
2. Animal Biology and Medical Botany.
3. Junior and Senior Materia Medica.
4. Junior 2nd Senior Anatomy.
5. Senior Physiology and Histology.
6. Senior Chemistry.

D.—1. Preliminary Honour Chemistry.
2. Preliminary Honour Animal Biology.

Examination on Translation in French or German at end of second, third and fourth years. (See page 66.)

4. No student is allowed to take a Senior class before passing the Junior in the same subject.

5. No student is allowed to attend or pass more than five classes in any one year. A sixth class may be added if it be a subject in which he has already failed.

6. Students should take the Pass classes in Engish, Classics, French, German and Mathematics in the first two years of their course.

SIX YEARS' COURSES, B.A. AND B.Sc.

Students taking these courses are required to register the first two years in Arts alone and pay the class and registration fees in Arts, to register the second two years in both Arts and Mining, to pay both registration fees and the Mining class fees and to register the last two years in Mining only, paying registration and class fees. Arts classes are subject to the regulations in the Arts Calendar and Mining classes to the regulations in the Mining calendar.

A.—MINING ENGINEERING.

FIRST YEAR.

Junior Latin, Junior Greek, Junior French, Junior German, } Any two.

Junior English.
Mathematics, I.
Physics, I.

SECOND YEAR.

Senior English,
Junior Chemistry.
Mathematics, II.
Physics, II.

Mental Philosophy, Senior Latin, Senior Greek, Senior French, Senior German, } Any one.

THIRD YEAR.

Junior Political Economy, } Any
Medieval History. } one.
Senior Chemistry.
Pass Mineralogy,
Workshop, 1.
Surveying 1.
Drawing, 1.

FOURTH YEAR.

Geology, 1.
Preliminary Honour Chemistry.
Preliminary Honour Mineralogy.
Descriptive Geometry.
Surveying, 1.
General Engineering, 1.
Drawing, 11.
Workshop, 11.

FIFTH YEAR.

Same as third year B. Sc. course.

SIXTH YEAR.

Same as fourth year B. Sc. course.

D.—CHEMICAL ENGINEERING.

FIRST YEAR.

Junior Latin, } Any two.
Junior Greek,
Junior French,
Junior German,
Junior English,
Mathematics, 1.
Physics, 1.

SECOND YEAR.

Senior English,
Junior Chemistry.
Physics, 11.
Mathematics, 11.
Mental Philosophy, } Any one.
Senior Latin,
Senior Greek,
Senior French,
Senior German,

THIRD YEAR.

Junior Political Economy, } Any
Medieval History. } one.
Senior Chemistry,
Surveying, 1.
Workshop, 1.
Drawing, 1.
Pass Mineralogy.

FOURTH YEAR.

Senior Political Economy, } Any one.
Moral Philosophy,
Preliminary Honour Latin,
Preliminary Honour French,
Preliminary Hon'r German.
Intermediate Hon'r English.
Qualitative Analysis,
Workshop, 11.
General Engineering, 1.
Mechanical Drawing, 1.

FIFTH YEAR.

Same as third year B. Sc. course.

SIXTH YEAR.

Same as fourth year B. Sc. Course.

E.—CIVIL ENGINEERING.

FIRST YEAR.

Junior Latin, Junior Greek, Junior French, Junior German. } Any two.

Junior English,
Mathematics, 1.
Physics, 1.

SECOND YEAR.

Senior English,
Junior Chemistry.

Physics, 11.
Mathematics, 11.

Mental Philosophy, Senior Latin, Senior Greek, Senior French, Senior German, } Any one.

THIRD YEAR.

Junior Political Economy, Medieval History, } Any one.

Workshop, 1.
Drawing, 1.

Senior Chemistry,
Pass Mineralogy,
Surveying 1.

FOURTH YEAR.

Geology, 1.
Drawing, 11.

Workshop, 11.
Descriptive Geometry.

Senior Political Economy, Moral Philosophy, Preliminary Honour Latin, Preliminary Honour French, Preliminary Hon'r German, Intermediate Hon'r English, } Any one.

Mapping, 1.
General Engineering, 1.
Surveying, 2.

FIFTH YEAR.

Same as third year B. Sc. course.

SIXTH YEAR.

Same as fourth year B. Sc. course.

F.—MECHANICAL ENGINEERING.

FIRST YEAR.

Junior Latin, Junior Greek, Junior French, Junior German, } Any two.

Junior English,
Mathematics, 1.
Physics, 1.

SECOND YEAR.

Mental Philosophy,
Senior Latin,
Senior Greek,
Senior French,
Senior German,
} Any one.

Mathematics, II.
Senior English,
Junior Chemistry.
Physics, II.

THIRD YEAR.

Junior Political Economy,
Medieval History.
} Any one.

Senior Chemistry,
Pass Mineralogy,
Surveying I.

Workshop, I.
Drawing, I.

FOURTH YEAR.

Workshop, II.

Drawing, II., III. and IV.
Descriptive Geometry,
General Engineering, I.

Senior Political Economy,
Moral Philosophy,
Preliminary Honour Latin,
Preliminary Honour French,
Preliminary Hon'r German,
Intermediate Hon'r English.
} Any one.

FIFTH YEAR.

Same as third year B. Sc. Course.

SIXTH YEAR.

Same as fourth year B. Sc. Course.

G.—ELECTRICAL ENGINEERING.

FIRST YEAR.

Junior Latin,
Junior Greek,
Junior French,
Junior German,
} Any two.

Junior English,
Mathematics I.
Physics, I.

SECOND YEAR.

Senior English,
Junior Chemistry.

Physics, II and III.
Mathematics, II.

Mental Philosophy,
Senior Latin,
Senior Greek,
Senior French,
Senior German,
} Any one.

THIRD YEAR.

Junior Political Economy,
Medieval History.
} Any one.

Senior Chemistry,
Pass Mineralogy,
Surveying I.

Workshop, I.
Drawing, I.

FOURTH YEAR.

Drawing, II., III.	Senior Political Economy,	Any one.
Descriptive Geometry,	Moral Philosophy,	
	Preliminary Honour Latin,	
	Preliminary Honour French,	
Workshop II.	Preliminary Hon'r German,	
General Engineering I.	Intermediate Hon'r English,	

FIFTH YEAR.

Same as third year B. Sc. course.

SIXTH YEAR.

Same as fourth year B. Sc. course.

ARTICLE IX.—HONOUR COURSES.

1. *Students preparing for the position of High School Master are recommended to take one of the courses that qualify for Specialists' Certificates under the Departmental Regulations.*

2. The degree of M.A. will be conferred on students who take Pass standing in the Pass classes, and first class Honours in the Honour classes, in any one of the following courses.

3. The degree of B.A. will be conferred on candidates who take Pass standing in the Pass classes, and second or third class honours in the Honour classes of any one of the following courses:

4.—COURSE A.—LITERATURE AND PHILOSOPHY.

PASS CLASSES

A.—1. Junior and Senior Latin.
2. Junior and Senior Greek. *(a)*
3. Junior and Senior French.
4. Junior and Senior German.
} Any one.

B.—1. Junior English.
2. Senior English.
3. Mental or Moral Philosophy.
} Three.

C.—1. Junior Mathematics.
2. Animal Biology.
3. Botany.
} One.

D.—1. Junior and Senior Greek.*
2. Junior and Senior French.*
3. Junior and Senior German.*
4. Moral Philosophy.
5. Economics and Politics.
6. Mediaeval and English Constitutional History.

} Any two.

*Only for those who have not taken them.

HONOUR CLASSES.

1. Preliminary and Final Honour Latin.
2. Prelimihary and Final Honour Greek.
3. Preliminary and Final Honour French.
4. Preliminary and Final Honour German.
5. Preliminary, Intermediate and Final Honour English.
6. Preliminary and Final Honour History.
7. Preliminary and Final Honour Political Science.
8. Preliminary and Final Honour Mental Philosophy.
9. Preliminary and Final Honour Moral Philosophy.

} Any Two.

(a) Students taking Greek will not be required to take the class in C.

5.—Course B.—Mathematics and Physics.

PASS CLASSES.

Junior English.
Senior English.
Junior Mathematics.
Senior Mathematics.
Junior Physics.
Senior Physics.
Mental or Moral Philosophy.

} Seven.

Medieval History.
Economics.
Mental or Moral Philosophy.
Junior Chemistry.

} Any one.

Junior Latin.
Senior Latin.
Junior Greek.
Senior Greek.
Junior French.
Senior French.
Junior German.
Senior German.

} Any two.

One of the following Honour Groups:

1. Mathematics—Comprising Honour Mathematics, Preliminary Honour Physics and Practical Astronomy.

2. Physics—Comprising Preliminary and Final Honour Physics, subjects 1, 2, 3, 4, 5, 6, 7, of Honour Mathematics, and Descriptive Astronomy.

6.—Course C.—Science.

PASS CLASSES.

Junior English.
Senior English.
Junior Mathematics.
Senior Mathematics.
Mental Philosophy.
Junior Physics.
Senior Physics.
Junior Chemistry.
Senior Chemistry.
} Nine.

Junior Latin.
Senior Latin.
Junior Greek.
Senior Greek.
Junior French.
Senior French.
Junior German.
Senior German.
Moral Philosophy.
} Any two.

One of the following Honour Groups:

1. Preliminary and Final Honour Chemistry and Preliminary and Final Honour Experimental Physics.

2. Preliminary and Final Honour Chemistry, with either Preliminary and Final Honour Botany or Preliminary and Final Honour Animal Biology.

3. Preliminary and Final Honour Chemistry, Preliminary and Final Honour Geology, Preliminary and Final Honour Mineralogy. —Any two.

Specialists' Courses.

7. By agreement with the Education Department of Ontario, candidates taking an M.A. degree or B.A. with second class honours(sixty six per cent.) in any of the following courses and attending not less than two full sessions will receive the nonprofessional qualification of Specialist.

8. The degree of M.A. will be conferred on students who take Pass standing in the Pass classes and first class Honours in the Honour classes in any one of the following courses.

9. The degree of B.A. will be conferred on candidates who take Pass standing in the Pass classes and second or third class Honours in the Honour classes of any one of the following courses:

COURSE I.—CLASSICS.

Pass Classes.

Junior and Senior Latin.
Junior and Senior Greek.
Junior and Senior English.
Mental and Moral Philosophy.
Junior Mathematics.
English Constitutional History.
Junior Physics.
Junior Chemistry. } Any one.
Pass Animal Biology.

Honour Classes.

Honour Latin, Preliminary and Final.
Honour Greek, Preliminary and Final.
Preliminary Honour Latin and Greek include the Roman and Grecian History.

COURSE II.—ENGLISH AND HISTORY (CLASSICS OPTION.)

Pass Classes.

Junior and Senior Latin.
Junior and Senior Greek.
Junior and Senior English.
Mental and Moral Philosophy.
Junior Mathematics.
Mediaeval and English Constitutional History.
Junior Physics.
Junior Chemistry. } Any one.
Pass Animal Biology.

Honour Classes.

Honour English, Preliminary, Intermediate and Final.
Honour History, Preliminary.
Honour Greek, Preliminary.
Honour Latin, Preliminary.

COURSE III.—ENGLISH AND HISTORY (MODERNS OPTION.)

Pass Classes.

Junior and Senior Latin.
Junior and Senior French.
Junior and Senior German.

Junior and Senior English.
Junior Mathematics.
Mediaeval and English Constitutional History.
Mental or Moral Philosophy.
Junior Physic. }
Junior Chemistry. } Any one.
Pass Animal Biology. }

Honour Classes.

English, Preliminary, Intermediate and Final Honours.
History, Preliminary Honours.
French, Preliminary Honours.
German, Preliminary Honours.

COURSE IV.—FRENCH AND GERMAN.

Pass Classes.

Junior and Senior Latin.
Junior and Senior French.
Junior and Senior German.
Junior and Senior English.
Junior Mathematics.
Mediaeval and English Constitutional History.
Junior Physics. }
Junior Chemistry. } Any one.
Pass Animal Biology. }

Honour Classes.

English, Intermediate Honours.
French, Preliminary and Final Honours.
German, Preliminary and Final Honours.

COURSE V.—MODERNS, (ENGLISH, FRENCH AND GERMAN), AND HISTORY.

Pass Classes.

Junior and Senior Latin.
Junior and Senior German.
Junior and Senior French.
Junior and Senior English.
Junior Mathematics.
Mental or Moral Philosophy.
Mediaeval and English Constitutional History (Honour standing required.)
Junior Physics. }
Junior Chemistry. } Any one.
Pass Animal Biology. }

Honour Classes.

Honour English, Preliminary, Intermediate and Final A.
Honour German, Preliminary and Intermediate.
Honour French, Preliminary and Intermediate.

COURSE VI.—MATHEMATICS.

Pass Classes.

Junior Latin.
Junior French, German or Greek.
Junior and Senior English.
Mental or Moral Philosophy.
Junior and Senior Physics.
Junior and Senior Mathematics.

Honour Classes.

Preliminary Honour Physics, with Practical Astronomy.
Honour Mathematics.

COURSE VII.—MATHEMATICS AND PHYSICS.

Pass Classes.

Junior Latin.
Junior French, German or Greek.
Junior and Senior English.
Mental or Moral Philosophy.
Junior and Senior Physics.
Junior and Senior Mathematics.

Honour Classes.

Preliminary Honour Physics, with Descriptive Astronomy.
Final Honour Physics.
Honour Mathematics, No. 1, 2, 3, 4, 5, 6, 7.

COURSE VIII.—SCIENCE.

Pass Classes.

Junior Latin.
Junior French, German or Greek.
Junior and Senior English.
Junior and Senior Mathematics.
Junior and Senior Physics (Laboratory Practice in both).
Junior and Senior Chemistry.
Botany.
Animal Biology.
Mineralogy.
Geology.

Honour Classes.

Preliminary Honour Chemistry.
Preliminary Honour Botany.
Preliminary Honour Animal Biology.

Together with any one of the following groups :

(a). Final Honour Botany and Final Honour Animal Biology.
(b). Experimental Honour Physics and Final Honour Chemistry.

(c). Final Honour Chemistry and Preliminary and Final Honour Mineralogy.

(d). Preliminary Honour Mineralogy and Preliminary and Final Honour Geology.

16. Students intending to teach in Ontario are referred to the calendar of the Ontario Normal College for information regarding Professional Examinations.

ARTICLE X. SUBJECTS OF STUDY FOR B.A. AND M.A.

LATIN.

PROFESSOR.—Walter J. Pike, M.A., B.A., (Cantab.)
ASSISTANT—Professor A. B. Nicholson, B.A.
TUTORS.—T. S. Duncan, M.A., R. A. McLean, B.A.

JUNIOR CLASS.

Translation from the books specified with questions on the Grammar and subject matter. Allen's Latin Grammar (Clarendon Press) is used in class.

Latin Prose Composition based on the books read and Fletcher & Henderson's Latin Prose Composition, sections 1-40.

A knowledge of Roman Antiquities from Wilkins' *'Primer.*

Translation of simple Latin at sight.

Cicero, *Pro Milone*, (Reid, Greenough & Kittredge).
Horace, *Odes I*, (Gow).
Vergil, *Aeneid VI*, (Page, Sidgwick).

Extra-mural students are charged a fee of $3 for the examination of the exercises to be done during the session.

SENIOR CLASS.

Translation from the books specified with questions on grammar and subject matter. These books illustrate Roman Ethical and Historical Writing, and Epic and Dramatic Poetry.

Translation at sight and Latin Composition based on the books read and Fletcher & Henderson's Latin Prose Composition, sections 41—64.

Outlines of Roman Literature.

Cicero, *De Officiis III* (Holden).
Livy V., (Whibley).
Terence, *Adelphi* (Sloman: Clarendon Press).
Vergil, *Aeneid X.*, (Sidgwick, Owen).

Useful books of reference and the best editions of the prescribed texts are retained in the Class Library during the session for the use of students. Extra-mural students should consult the Professor before ordering the text books and do so as early as possible.

HONOURS.

Candidates for Preliminary and Final Honours in Latin should note that special stress is laid on Composition and Sight Translation. Passages will also be set from the books specified below, good editions of which are recommended in each case, while the best plain text is that of the Bibliotheca Oxoniensis, and where this is not yet available, the Teubner. The Roman History required from candidates for Specialist certificates is included in the Preliminary or Final Honour examination, and must be taken. The course

comprises the main facts of the History and Literature of Rome to the death of Marcus Aurelius. Regular lectures on this and Latin Epigraphy, Archaeology, Syntax, the History of the Language, Literary and Textual Criticism and Roman Philosophy are given during the session illustrating the course of reading prescribed and preparatory to the Ph.D. course.

The following are excellent books for use, reference and private reading:—Lewis & Short's Latin-English Dictionary. Harper's New Classical Dictionary by Peck, Mackail's Latin Literature, Allen & Greenough's New Latin Grammar. Histories of Rome by Botsford, How and Leigh, Bury, Johnston's Private Life of the Romans, Greenidge's Roman Public Life, Tyrrell's Latin Poetry, Forsyth's Life of Cicero, Inge's Society in Rome under the Caesars. All such books and the best editions of the prescribed texts will be found in the consulting and loan departments of the University Library.

PRELIMINARY.

(This class must be taken at least one year before the final examinations).

Cicero *Philippic* II, (Peskett), *De Officiis III*, (Holden).
Pliny, *Selected Letters*, (Merrill).
Tacitus, *Annals I-III*, (Furneaux's small edition, Allen).
Vergil, *Aeneid*, Books I. II, IV, V, VI, X, XI, XII.
Horace, *Odes and Epistles I*, (Page, Wilkins & Palmer, in one vol., Macmillan).
Crowell's selections from the Latin Poets.

FINAL.

Cicero, *De Officiis III*, (Holden), *De Oratore I*, (Wilkins), *Philippic II*, (Peskett), Cicero in his Letters (Macmillan).
Livy I, (Seeley).
Tacitus, *Annals I-IV*, *Germania and Agricola* (Church & Brodribb).
Pliny, *Selected Letters*, (Merrill).
Quintilian X (Peterson, smaller edition).
Vergil and Horace complete.
Juvenal, *Satires*, (Duff).
Plautus, *Trinummus*, (Gray).
Crowell's Selections from the Latin Poets.
Allen's Remnants of Early Latin.
Minucius Rufus, *Octavius*, (Holden).

Extra-mural students of the Senior and Honou Classes are charged a fee of $5 for the examination of the exercises to be done during the session. Professor Pike should be freely consulted on any question connected with the course.

GREEK.

PROFESSOR.—T. Callander, M.A. (Abdn.), B.A. (Oxon).
ASSISTANT.—Prof. A. B. Nicholson, B.A.
TUTOR.—J. M. Macdonnell.

Junior Class.

Greek Grammar, (Goodwin).
Greek Composition. (Text-book: Fletcher & Nicholson's *Elementary Greek Prose Composition.*)
Translation from authors not specified.
Plato, *Charmides.*
Homer, *Odyssey, IX-X.* (Merry.)
Lucian, *Vera Historia I.* (Jerram.)

Extra-mural students are charged a fee of $3 for the examination of the exercises which they must do during the session.

Senior Year.

Thucydides II (Macmillan).
Homer, *Odyssey I-IV* (Merry.)
St. Paul, *Galatians.*
Greek Grammar and Composition.
Translation from authors not specified.

Honours.

Candidates for Preliminary and Final Honours in Greek should note that special stress is laid on Composition and Unseen Translation. Passages will also be set for translation from the books specified below. The Greek History required from candidates for Special Certificates is included in the Preliminary Honour Examinations and must also be taken.

Books recommended:

Murray, *Greek Literature.*
Goodwin, *Greek Grammar.*
Grote, *History of Greece.*
Thirlwall, *History of Greece.*
Hogarth, *Philip and Alexander.*
Schuchhardt, *Schliemann's Excavations.*
Jebb, *Homer.*
Geddes, *Problem of the Homeric Poems.*

Instead of the editions mentioned below students may find it convenient to use the Teubner series

Preliminary

(The examination in this class must be taken at least one year before the final examination.)

Thucydides II. (Macmillan).
Plutarch, *Solon, Pericles.*
Homer, *Odyssey I-XII* (Merry).
Euripides, *Bacchae* (Tyrrell, Macmillan).
Sophocles, *Antigone* (Jebb).
Aristophanes, *Birds* (Merry).
Greek Grammar and Composition.

Final.

Herodotus VIII, IX.
Thucydides III, IV.
Demosthenes, *De Corona* (Goodwin) and *Olynthiacs* (Glover).
Plato, *Republic VIII-X* (Campell & Jowett).
Aristotle, *Ethics I, II, X.*
Plutarch, *Solon, Pericles* (vol. I, Teubner).
Homer, *Odyssey.*
Aeschylus, *Agamemnon* (Sidgwick).
Prometheus (Sikes & Wilson).
Sophocles, *Electra Antigone* (Jebb).
Euripides, *Bacchae* (Macmillan).
Aristophanes, *Clouds* (Merry), *Birds* (Merry).
Pindar, *Olympians* (Gildersleeve).
Theocritus, *Selections.*

Students proceeding to Theology may take in the Preliminary course one of the Synoptic Gospels and The Acts of the Apostles in place of Plutarch, Solon and Pericles. In the Final course they may offer the Synoptic Gospel chosen and the fourth Gospel, The Acts of the Apostles, two Epistles of St. Paul and The Epistles to the Hebrews instead of Plutarch, Theocritus, one play of Aristophanes, one of the Sophocles and the Olynthiacs of Demosthenes.

Extra-mural students of Senior and Honour Classes are charged a fee of $5 for the examination of the exercises which they must do during the session.

COMPARATIVE PHILOLOGY AND SANSCRIT.

PROFESSOR—A. B. Nicholson, B.A.

To meet the needs of those who desire to have some knowledge of linguistic processes three courses of lectures are arranged, the first, for those who have a knowledge of Latin and Greek; the second, for those who know Latin but not Greek, and the third for those who wish to extend their knowledge of Comparative Philology by studying Sanscrit.

COURSE I.—Lectures on Greek and Latin Philology (one hour per week).

For reference: Henry's Compar. Grammar of Greek and Latin.
Brugmann's Compar. Grammar.

This course is strongly recommended to all Honour candidates in Greek and Latin.

COURSE II.—Phonetics and History of the Latin Language (one hour per week).

Text-books: Lindsay's Short Historical Latin Grammar.
Allen's Remnants of early Latin.

This course is intended for Honour students in Latin who have no knowledge of Greek.

COURSE III.—Elements of the Sanscrit Language (one hour per week).

Text books : Perry's Sanscrit Primer.
Whitney's Sanscrit Grammar.
Lanman's Sanscrit Grammar.

For consultation : A. A. MacDonell's Sanscrit Literature.
Kaegi's Rig-Veda translated by R. Arrowsmith.

GERMAN LANGUAGE AND LITERATURE.

PROFESSOR—J. Macgillivray, Ph.D., (Leipsic).

TUTOR—Miss Grace Clarke, M.A.

JUNIOR CLASS.

The following works will be translated and studied :

Baumbach, Die vergessene Glocke, Das Wasser der Jugend, Weihnachtszauber (Macmillan & Co.)
Carmen Sylva, Ein Gebet (Macmillan & Co.)
Benedix, Eigensinn (Heath & Co.)
Freytag, Die Journalisten (Ginn & Co.)
Fraas, Geologie, 1-50 (Sammlung Goschen.)
Translation from authors not specified.
Grammar and Dictation.

Oral and Written Composition and Translation into German, based on the above works.

SENIOR CLASS.

The following works will be read:

Heyse, Der Verlorene Sohn (Macmillan & Co.)
Theodor Storm, Der Schimmelreiter (Ginn & Co.)
Benedix, Die Hochzeitsreise.
Chamisso, Balladen (Macmillan & Co.)
Heine, Balladen (Macmillan & Co.)
Goethe, Hermann und Dorothea (Ginn & Co.)
Fraas, Geologie.
Fuchs, Volkswirtschaftslehre (Sammlung Göschen.)
Translation from authors not specified
Writing German from Dictation.

Oral and Written Composition and Translation into German, based on the above works.

HONOURS

The examination in Preliminary Honours must be passed at least one year before that in intermediate, or in intermediate and

final. Preliminary Honours will count for a pass class. Class exercises in Honour work are conducted in German. Short courses of lectures in German are also delivered.

Preliminary.

Heyse, Novellen [8 ter Band V. Herz] (Selections.)
Frenssen, Jörn Uhl I-VIII.
Schiller, Maria Stuart.
Goethe, Faust I., Balladen (Macmillan's Balladenbuch.)
Lessing, Emilia Galotti.
Koch, Geschichte der deutschen Litteratur (Sammlung Göschen.)
Lyon, Deutsche Grammatik und Kurze Geschichte der deutschen Sprache.
Writing German from Dictation.

Oral and Written Composition and Translation into German, based on the above works.

Intermediate.

Baumbach, Neue Märchen.
Heyse, Novellen (8 ter B.V.)
Frenssen, Jörn Uhl I-XV.
Schiller, Die Jungfrau von Orleans, Wilhelm Tell, Balladen (Balladenbuch).
Goethe, Faust I, Iphigenie, Balladen (Balladenbuch.)
Lessing, Emilia Galotti.
Scheffel, Ekkehard.
Felix Dahn, Gelimer.
Elsenhans, Psychologie und Logik zur Einführung in die Philosophie (Summlung Göschen).
Braune, Gothische Grammatik und Ulfilas-Matthäus 9.
Wright, Primer of Old High German—Das Ludwigslied.
Clother, Das Nibelungenlied in Auswahl (Sammlung Göschen.)
Lyon, Deutsche Grammatik und Kurze Geschichte der Deutschen Sprache.
Koch, Geschichte der Deutschen Literatur.

Oral and Written Composition and Translation into German, based on the above works.

Final.

Baumbach, Neue Mährchen, Erzählungen und Mährchen.
Heyse, Novellen (8 ter B.V.)
Frenssen, Jörn Uhl.
Felix Dahn, Gelimer.
Freytag, Die Verlorene Handschrift.
Scheffel, Ekkehard, Der Trompeter von Säkkingen.
Goethe, Faust, Egmont, Torquato Tasso, Iphigenie.
Schiller, Don Carlos, Wallenstein, Maria Stuart, Die Jungfrau von Orleans, Wilhelm Tell.

Lessing, Nathan der Weise, Emilia Galotti.
Behagel, Die Deutsche Sprache.
Braune, Gothische Grammatik und Ulfilas—Matthäus 9, 10, 11.
Wright, Primer of Old High German—Musspili, Das Ludwigslied, Otfried's Evangelienbuch.
Clother, Das Nibelungenlied in Auswahl.
Koch, Geschichte der Deutschen Litteratur.
Kluge, Geschichte der Deutschen Litteratur.
Oral and Written Composition and Translation into German based on the above works.

ROMANCE LANGUAGES AND LITERATURE.

PROFESSOR—P. G. C. Campbell, M.A., (Oxon.)

TUTOR—Miss Kathleen Teskey, M.A.

FRENCH.

JUNIOR CLASS.

Works to be studied—in the order named :—

Labiche—Le Voyage de M. Perrichon.
Labiche—La Grammaire.
Anon—La Main Malheureuse (Heath & Co.)
Victor Hugo—La Chute (episode of Les Misérables.)
LaFontaine—Fables, Book II.
Contes et Nouvelles (Ed. J. Lazarre-Hachette & Co.)
Grammar and Prose.
Writing French from Dictation.
Written Composition based on the works read.

NOTE—Extra-mural students should procure Grandgents' "French Composition" (Heath & Co.)

SENIOR CLASS.

Ferdinand Fabre—L'Abbé Roitelet.
Balzac—Cinq Scènes de la Comédie Humaine (Heath & Co.)
George Sand—La Mare au Diable.
About—Le Roi des Montagnes.
Foncin—Le Pays de France (Armand Colin.)
Augier—Le Gendre de M. Poirier.
Rosey—French Literature, (Blackie & Sons).
Unseen Translation.
Translation into French Prose. Text book, "Graduated Course of Translation into French Prose."—V. Spiers.
Writing French from Dictation.
Essays—Nov. 10th, A critical study of La Mare au Diable; Feb. 5th, The chief characteristics of French Literature.

N.B.—For those who have taken the Junior French in the combined B.A. and M.D. course (page 52) the work in the next three years for examination will be :—

II Year—Le Gendre de M. Poirier.
La Mare au Diable.
Unseen Translation of a scientific character.

III Year—Descartes—Discours de la Méthode.
Unseen Translation of a scientific character.

IV Year—Cajal-Structure du Système Nerveux.
Unseen Translation of a scientific character.

Honours.

Preliminary.

(The examination in this class must be taken at least one year before the intermediate or final examination. It may also be taken as a pass class.)

Corneille—Horace.
Racine—Iphigénie.
*Molière—L'Avare.
La Bruyère—Caractères I-X.
*Rousseau—Contrat Social.
*Voltaire—Mérope.
Victor Hugo—Ruy Blas.
*Pierre Loti—Pêcheur d'Islande.
Labiche—La Grammaire.
Writing from Dictation.
Translation into French Prose. Text book: V. Spiers' "French Prose."
Outline of the History of French Literature with special reference to the 17th, 18th and 19th centuries.

Text book: Petit de Julleville—Leçons de Littérature Française.
Consult: The various studies of Sainte Beuve.
Brunétiere—Manuel de l'Histoire de la Littérature Française.

N.B.—Preliminary Honour Students intending to take Final Honours are recommended to attend the lectures on the Theory of Phonetic change and the History of the French Language in their first year of Honour work.

Intermediate.

(For those taking Specialist Course V)

Translation from Unseen authors.
Translation into French Prose.
Composition in French.
Texts set (Unabridged Editions) for translation and study:—

Cent. XVII.—Corneille—Le Cid, Horace.
Molière—L'Avare.
Racine—Iphigénie, Andromaque.

*To be specially studied in class.

Boileau—L'Art Poétique, Canto I.
Descartes—Discours de la Méthode.

Cent. XVIII.—Rousseau—Contrat Social.
Beaumarchais—Le Barbier de Séville.
Chateaubriand—Atala, René.

Cent. XIX.—Victor Hugo—Les Orientales, I-X and XXVIII—
Cromwell—[Preface.]
Les Misérables (Fantine.)
De Tocqueville—L'Ancien Régime.
Balzac—Eugénie Grandet.
A. Daudet—Tartarin sur les Alpes.

The Literary History of France.

The Principles, in outline, of Literary Criticism applied to French Literature.

Text-book:—

Aristotle's Poetics (edited by Butcher.)

Final.

In addition to the work set for Intermediate Honours the following work is prescribed:

Texts—La Fontaine—Fables VIII-X.
Molière—Les Précieuses Ridicules, Le Médecin Malgrè Lui.
La Bruyère—Caractères I-X.
Voltaire—Mérope.
V. Hugo—Ruy Blas.
Pierre Loti—Pêcheur d' Islande.

PHILOLOGY—1. The General Theory of Phonetic Change.
2. The History of the French Language.

Text-book—Brachet—Grammaire Historique de la Langue Française.

3. The Grammar of Old French.
4. The study of Old French Texts.

Text book—Clédat—Chrestomathie du Moyen Age [Vie de Saint Aléxis, Chanson de Roland, Raoul de Cambrai, Froissart.

Consult also:
Nyrop—"Grammaire Historique de la Langue Française.
Gröber—"Grundriss von Romanischer Philologie.
Meyer Lübke—"Grammaire des Langues Romaines.

ESSAYS for 1905-6 for Honour Students:—

Nov. 3rd—Compare Corneille and Racine from the point of view of (a) their drawing of Character, (b) their plots.

Dec. 7th—"Il fant qu'une porte soit ouverte on fermée."

Jan. 28th—The French Character as illustrated by the Literature.

Mar. 3rd—A critical study of "Le Pêcheur d' Islande"—For Final Honours only.

These essays to be written in French.

Italian.

Voluntary classes are held. No fee. Tickets to be obtained from the Registrar.

First Year—Grammar—(Grandgent.)
Unseen Translation.
De Amicis—Il più bel Giorno della Vita.
Dante—Inferno I-II.

Second Year—Translation into Italian (Grandgent's Italian Composition.)
History of Italian Literature (Snell's Primer of Italian Literature.)
Dante—Inferno I-X.
Tasso—La Jerusalemme Liberata I-II.
Del Testa—Le Conscienze Elastiche.
Carcano—La Nunziata.
Unseen Translation.

Spanish.

Valera—El Pájaro Verde (Ginn & Co.)
Moratin—El si de las Ninas (Ginn & Co.)
Alarcón—El Capitán Veneno (Heath & Co.)
Calderon—La Vida es Sueno (Heath & Co.)
Cervantes—Don Quixote (Heath & Co.)
Edgren's Grammar (Heath & Co.)
Ford's Composition (Heath & Co.)
Writing Spanish from Dictation.
Outline of the History of the Literature.

Note.—Extra-mural students of Modern Languages should obtain competent teachers for oral instruction as no candidate will be accepted who fails in the oral examination. Pass candidates may take the oral examination at outside centres, provided an examiner approved by the Senate be obtained; but Intermediate and Final Honour candidates must pass their oral examination at the University.

A tutorial fee of $3 is required for each pass class and $5 for each honour class.

ENGLISH LANGUAGE AND LITERATURE.

Professor—James Cappon, M.A.
Assistant-Professor—John Marshall, M.A.
Tutors—Logie Macdonnell, M.A., H. May.

Junior Class.

1. Practical course in Rhetoric and Composition.
2. Analysis of style in connection with the study of passages from Bacon, Addison, Johnson, Washington Irving, Macaulay, Ruskin, Carlyle, Burroughs, The Best English Essays, The World's Greatest Short Stories (McClurg & Co., Chicago.)

Bacon's Essays (Of Truth, Of Studies). (Maynard, Merrill & Co., New York.)

Irving's Sketch-Book (Visit to Shakespeare's Birthplace, Rip Van Winkle). (Maynard, Merrill & Co.)

Macaulay's Essay on Boswell's Johnson. (Maynard, Merrill & Co.)

John Burroughs, Bees (Baldwin's Specimen's of Prose Description. Henry Holt & Co., New York.)

Carlyle, The Storming of the Bastille (Baldwin's Specimens.)

3. A detailed study (in class) of the following :

Chaucer, Prologue to Canterbury Tales. (The descriptions of the Knight, Squire, Prioress, Monk, Friar, Student, Merchant, Franklin, Doctor, Shipman, Parson.)

Shakespeare, The Merchant of Venice.

Longfellow, Prelude, Nuremberg, The Belfry of Bruges, The Skeleton in Armour, Amalfi, The Village Blacksmith, The Day is Done, The Secret of the Sea.

Tennyson, The Palace of Art, The Lady of Shalott, "Love Thou Thy Land," The Lord of Burleigh.

Senior Class.

I

(a) Shakespeare, Hamlet.
Milton, Paradise Lost, Book I.

(b) Dryden, Epistle to Mr. Congreve, the Descriptions of Achitophel and Zimri in *Absolom and Achitophel*, Alexander's Feast.
Pope, Epistle to Arbuthnot (Satires.)
Johnson, Vanity of Human Wishes.
Gray, Elegy, Ode on Eton College.
Collins, Ode to Liberty, Ode to the Passions.
Goldsmith, The Deserted Village.
Burns, The Cotter's Saturday Night, A Bard's Epitaph To a Mouse, Whistle and I'll Come to ye my lad, Farewell to Nancy; Tam Glen.
(Read Gosse, Eighteenth Century Literature, chaps, I, III, IV, and IX, X, XI.

(c) Wordsworth, Ruth, Song at the Feast of Brougham Castle. Lines written near Tintern Abbey.
Keats, Ode on a Grecian Urn, On First Looking into Chapman's Homer.
Browning, A Grammarian's Funeral, Abt Vogler, A Toccata of Galuppi's.

(d) Edward Gibbon, Description of Byzantium (Baldwin's Specimens of Prose Description. Henry Holt & Co.)
Macaulay, Boswell's Life of Johnson.
Carlyle, Essay on Burns.
Charles Lamb, The South-Sea House (Baldwin's Specimens of Prose Description.)

Ruskin, Geneva (Baldwin's Specimens of Prose Description.)
Adam Smith, The Division of Labour (Lamont's Specimens of Exposition. Henry Holt & Co.)
Matthew Arnold, Wordsworth (Lamont's Specimens of Exposition.)

II.

Development of Poetry and Poetic Forms.
(a) Development of Poetry from Chaucer to Shakespeare.
(b) Characteristics of Epic, Lyric and Dramatic Poetry.
(c) The Development of the Rhymed Couplet.
(d) The Development of the Ballad Form.
(e) The Development of Blank Verse.
(f) History of the Sonnet.

Extra-mural students may consult Corson's Primer of English Verse and Gummere's Handbook of Poetics.)

III.

(a) Lectures on the History of the English Language.
(b) Specimens of Early English, Robert of Gloucester, (Morris & Skeat, Part II.)
(c) For extra-mural students: O. F. Emerson's History of the English Language (Macmillan & Co.) chapters III, IV, V, VII, IX, X, XIII, XIV, XV, XVII, XVIII, XIX, XX, XXI, XXII.

HONOURS.

Preliminary.

1. Anglo-Saxon :—(Sweet's Anglo-Saxon Reader.)
Alfred's Preface to the *Cura Pastoralis.*
Alfred's Translation of Boethius.
Alfred's Translation of Beda (Account of the Foet Caedmon.)
Aelfric's Assumption of St. John.
Aelfric's Life of King Oswald.
Charters (Eadgifu).
Extract from the Beowulf, lines 1-150.
The Battle of Maldon.
2. Skeat, Principles of English Etymology (Chaps. VII, X, XI, XVIII, XIX, XXI).
For extra-mural students: O. F. Emerson's History of the English Language (Macmillan & Co.)
3. Ten Brink, Early English Literature, Book I.
Morris & Skeat, Specimens of Early English, Extracts I. and VII.

Intermediate.

Cowper, Table Talk, Progress of Error, Task, Book I.
Wordsworth, The Prelude, Books I, II, III, IV; the following poems from "Lyrical Ballads": The Thorn, Simon Lee, The

The Last of the Flock, The Mad Mother, The Idiot Boy, Expostulation and Reply, The Tables Turned, The Complaint of a Forsaken Indian Woman, Lines Written near Tintern Abbey, Hart Leap Well, There Was a Boy, The Brothers, Lucy Gray, Ruth, Lines Written upon a Tablet, The Two April Mornings, Nutting, Three Years She Grew, The Old Cumberland Beggar, Michael; the poems published as "Memorials of a Tour in Scotland (1803)"; the poems "dedicated to National Independence and Liberty," Part I, Yew Trees, She was a Phantom of Delight, I Wandered Lonely as a Cloud, Song at the Feast of Brougham Castle, Laodamia, Dion, Peter Bell, Fidelity, Ode to Duty, Character of the Happy Warrior, Ode on Immortality, Excursion Book I.

Keats, Ode on a Grecian Urn, Ode to a Nightingale, Isabella, Lamia, Byron, Bride of Abydos, Childe Harold, Canto III. Tennyson, Ulysses, Morte d' Arthur.

Clough, The Bothie, Through a Glass Darkly, Ah! Yet Consider it Again, Qua Cursum Ventus.

Browning, *(a)* The Grammarian's Funeral, Andrea Del Sarto, Fra Lippo Lippi, Pictor Ignotus, The Bishop Orders His Tomb, Bishop Blougram, How it strikes a Contemporary, Epistle of Karshish, Cleon; *(b)* Abt Vogler, Rabbi Ben Ezra, A Toccata of Galluppi's, The Laboratory, The Glove, Dis Aliter Visum, Youth and Art, Waring, The Englishman in Italy, Old Pictures, in Florence.

Arnold, on Translating Homer, Essays on Wordsworth and Byron, Essay on Poetry, (Essays in Criticism, Second Series), Culture and Anarchy, Chap. III.

Carlyle, Sartor Resartus, Past and Present (Chapters: Phenomena, Mammonism, Dilettantism, Labour, Reward, Democracy)

Ruskin, On Geneva.
Gibbon's Rome Chap. XXXV.
Adam Smith, Wealth of Nations, Bk. I, Chap. I.
J. H. Newman, Ancient Athens.

Final.

(Every candidate for Final Honours is subject to re-examination on the Intermediate texts.)

A.

Coleridge, Monody on Chatterton, France An Ode, To William Wordsworth, Christabel, Dejection An Ode, Hymn Before Sunrise in the Vale of Chamouni.

Shelley, Alastor, Hymn of Pan, Adonais, Stanzas written near Naples, Hymn to Intellectual Beauty, Prometheus Unbound.

Ruskin, Modern Painters, Vol. III, Part IV, Chaps. IV to XIII, (of the False Ideal, of the True Ideal, of Finish, of the Pathetic Fallacy, of Classical Landscape); The Stones of Venice (On the Nature of Gothic).

Carlyle, Life and Letters of Cromwell, [Introduction, Letters CXXXIX and CXL, containing accounts of the Battle of Dunbar (Part VI); Letter CLXXXVII, The Dismissal of the Rump (Part VII).]

Scott, Old Mortality.

Emerson, The Method of Nature, Literary Ethics (Essays and Orations).

Arnold, Essays in Criticism (First Series), On the Study of Celtic Literature, Sections 4, 5, 6; Culture and Anarchy, Chaps. II and III.

De Quincey, On Style (Historical and Critical Essays).

Browning, A Blot in the 'Scutcheon.

Clough, Religious Poems (except fragments of the Mystery), Amours de Voyage.

In addition the candidate is expected to understand the value of the following works, both as art and as interpretations of life, and to answer questions of a general nature on their style and methods:

Scott, The Antiquary, Redgauntlet.
Thackeray, Vanity Fair.
Hawthorne, The House of the Seven Gables.
Carlyle, Life of John Sterling.
Emerson, The American Scholar.

B.

ROMANCE PHILOLOGY.

1. The poetry of Chaucer is the centre of studies in this course.
2. Origin and development of the octosyllabic couplet; origin and development of decasyllabic verse.
3. The Compleynte unto Pite, The Book of the Duchess, House of Fame, and the Legend of Dido (Legend of Good Women). Use Skeat's edition of Chaucer's Minor Poems and The Legend of Good Women.
4. Development of the sonnet-form and its use by Petrarch, Spenser, Shakespeare, Milton and Wordsworth.
5. The structure of the stanza, in Provencal and Italian poetry, and in Chaucer.

Consult Ten Brink, Chaucer, Studien zur Geschichte seiner Entwicklung. Chaucer's Sprache and Verskunst.

Sandras, Etude sur Chaucer.

Schipper, Altenglische Metrik (Englische Metrik, Erster Tehil).

Grober, Romanische philologie (Romanische Verslehre von E. Stengel).

Bartsch, Grundriss zur Geschichte der provenzalischen Literatur. Sections 1, 2, 3, 4, 5, 13, 14, 18, 21, 22, 23, 24, 25, 26, 27, 28, 30, 44, 48, 49, 50, 56.

Dante, De Vulgari Eloquio. Lib. 2.

For Extra-Mural Students.

Junior Class.

Subjects of study the same as those for intra-mural students. A fee of $3 is charged for tutorial assistance.

Senior Class.

Subjects of study the same as those for intra-mural students. A fee of $5 is charged for tutorial assistance.

Honours.

The subjects of study for Honours are the same as those for intra-mural students. A corresponding class will be formed for the purpose of assisting the extra-mural students in intermediate and final honours in this department. The course will consist of extracts from Professor Cappon's lectures, selected chiefly for the purpose of suggesting methods of analysis and criticism, and accompanied by papers containing hints for study and prescribing themes for exercises and essays. This course is voluntary, and a corresponding tutor has been appointed to communicate with extra-mural students who may wish to take it.

A special fee of ten dollars will be charged for this course.

N.B.—Candidates who do not take the full course described above must at least take the part relating to exercises and essays. For this part alone the fee will be five dollars.

ELOCUTION.

A course in Elocution lasting about two and a half months will be given during the first term. The instructor will be the Rev. James Carruthers.

I. Vocal Training.

1. *Elements of Vocal Training.* Correct method of breathing. Training of the natural use of the voice. Faults of the voice, studied and corrected.

2. *Principles of Vocal Training.* Study of the vocal instruments and their natural use. Science of voice production.

II. Phonology.

1. *Vowels. Principles of vowel formation.* Distinction between vowels and articulations (Consonants).

2. *Articulation. Study of the elements of speech.* Development of the organs of articulation. Correction of common faults.

3. *Pronunciation. Training of the ear. Vocal quantity.*

Vocal Expression.

1. *Elementary principles of Vocal Expression.* Principles of inflection. Modulation. Emphasis. Verbal Grouping. Pausing. Expressive Reading.

IV. Gesture.

1. *Elementary Gesture.* Nature and kinds of action.

2. *Manifesting Gesture.* Study and development of the action of each agent of the body and expression.

3. *Representative Expression.*

Note on Gesture—The training outlined on Gesture is intended to dignify the study of it, by taking it out of the realm of studied artificiality, and by showing it to be a vital, organic part of the oral interpretation of literature and of public speaking. This training consists of Physical exercises for which special classes will be arranged.

Note—Individual Drill.—Students will be shown and helped personally in the particular work of the course. Two and a half hours each day will be devoted to individual drill.

V. Advanced Work.

Principles of vocal expression. Assimilation and dramatic instinct. Development of the imagination. Rhythm and melody in speech. Tone-color and harmony. Problems in vocal expression. Study of elementary psychic action and the practice of short extracts as the means of studying and expressing thought and feeling Extemporaneous speaking.

Students passing this course will be allowed 5 marks on either the Junior or Senior English examinations. A fee of $3 will be charged.

HISTORY.

Professor—Rev. George D. Ferguson, B.A.

Tutor—D. N. Morden.

Junior Class.

Medieval History.

A.

Lectures on :

The Study of History, its methods and purposes.
The Fall of the Roman Empire and rise of new nationalities.
The Feudal System.
The Crusades.
The Struggle of the Towns in the Middle Ages for Independence.
The Growth of Monarchy especially in France.
Europe at the time of the French Revolution.
The Congress of Vienna.

Text-book : Ferguson's Lectures on the History of the Middle Ages.

Books recommended to be read:

Gibbon's Decline and Fall of the Roman Empire.
Guizot's History of Civilization.
History of France by W. H. Jervas, revised by Arthur Hassall.

SENIOR CLASS.

English Constitutional History.

Lectures on:

The development of representative government.
The British Constitution.
The Constitution of the United States.
The Canadian Constitution.

Students will also be examined on:

Bourinot's Constitution of Canada.
Green's Larger History of the English People.

Books recommended to be read:

Freeman's Growth of the English Constitution.
Bryce's American Commonwealth.

Fortnightly essays are required in each class.

For Extra-Mural Students.

JUNIOR CLASS.

Text-book: Ferguson's Lectures on the History of the Middle Ages.

Students are also required to make themselves familiar with other books mentioned below, and to write essays in connection with them, which are to be given in punctually at the time stated.

Essay:—The growth of the Royal Power in France, Oct. 25th.
Hallam's Middle Ages, Chap. II.
Guizot's History of Civilization in France.
History of France by W. H. Jervas, revised by Arthur Hassall.
Essay:—The election to the Imperial Throne, Nov. 20th.
The Golden Bull of Charles IV, in Henderson's Historical Documents.
Gindely's Thirty Years War, Chaps. I-IV.
Kirkhoffer's Entstehung des Kur-Collegium.
Essay:—The formation of the Holy Roman Empire, Dec. 13th.
Bryce's Holy Roman Empire.
Gregorovius' History of the City of Rome in the Middle Ages. Vols. III and IV.
Church's—The beginning of the Middle Ages. (Epoch Series.)
Essay:—The Influence of the Crusades on Europe. Jan. 15th,
The Crusades (Story of the Nations Series).
Heeren, Essai sur L'Influence des Crusades.
Prescott's Robertson's Charles V. Introduction on the Progress of the History of Europe to the XVI century.

The Crusades, by Rev. G. W. Cox, M.A. (Epoch Series.)
Essay:—The Relations of Charles V with the Church. Feb. 6th.
Creighton's History of the Papacy, Vols. V. and VI.
Froude's Lectures on the Council of Trent.
Robertson's Life of Charles V.
Essay:—The state of Europe just before the French Revolution. February 28th.
The French Revolution and the First Empire, by S. R. Gardiner. (Epoch Series).
De Tocqueville's Ancien Regime.
Sorel, Europe et La Revolution Francaise, Vol. I.
Essay:—The Congress of Vienna, March 19th.
Allison's History of Europe, first series, Chap. LXXVII.
Life and Correspondence of Prince Talleyrand, Part VIII.

SENIOR CLASS.

Text-books:—Hallam's Middle Ages, Chaps. VIII and IX.
Green's Larger History of the English People.
Essay:—The English Courts under the Anglo-Saxons, and the Curia Regis of the Normans. October 18th.
Hallam's Middle Ages, Chap. VIII.
Stubb's Constitutional History of England, Chap. XI.
Essay:—The Constitutional changes made in the reign of Henry II. and Edward I. November 14th.
The Early Plantagenets, by Rev. W. Stubbs, D.D., Bishop of Chester. (Epoch Series).
Stubb's Constitutional History, Chap. XII.
Essay:—The Formation of the House of Commons and the growth of its power in regard to Taxation and Legislation down to the Tudors. December 13th.
Hallam's Middle Ages, Chap. VIII, and Green's Larger History of the English People, Vol. II.
Barnett Smith's History of the English Parliament.
Stubb's Constitution History of England, Chaps. XV. and XVII.
Essay:—Cardinal Wolsey's Foreign Policy. January 17th.
Froude's History of England, Vols. II and III.
Cardinal Wolsey, by Prof. M. Creighton. Bishop of London—(English Statesmen Series).
Essay:—The Grand Remonstrance. Feb. 14th.
Forster's The Grand Remonstrance.
Gardiner's History of England 1603-'42, Chaps. C. and CI.
Essay:—A comparison of the American Congress with the British Parliament. March 7th.
Bryce's American Commonwealth, Part I.
Bagehot's English Constitution.

HONOURS.

Preliminary.

LECTURES ON THE GENERAL PRINCIPLES OF GOVERNMENT.

Students will be examined on:

Stubb's Constitutional History of England, Vols. I, II and III, and Select Charters.
Guizot's Representative Government.
Rousseau's Social Contract.
Mill's Representative Government.

Books recommended:

Machiavelli's Prince.
Dicey's, The Law and the Constitution.
Hearn's Government of England.
Kemble's Anglo-Saxons in England.
Gneist's English Constitution.

Final.

Lectures:

(*a*) A comparison of the British Constitution with other Constitutions, especially with that of the United States. (*b*) On the Government of Colonies. (*c*) On the Foreign Policy of Britain. (*d*) On Cabinet Government and its Relation to the other powers in the state.

Students will also be examined on:

Hallam's Constitutional History of England.
May's Constitutional History.
Bryce's American Commonwealth.
Bagehot's English Constitution.
Bourinot's Manual of the Constitutional History of Canada.

Books recommended:

Todd's Parliamentary Government in England.
Todd's Parliamentary Government in the British Colonies.
De Tocqueville's Democracy in America.

Both Intra and Extra-mnral students in Honours are required to write the following essays, and in writing them to show some acquaintance with original authorities.

Preliminary.

1. *Essay*:—The social and political positions of the Boroughs in England, previous to the 14th century. Nov. 8th.
   Maitland's Township and Borough.
   Merewether and Stephen's History of Boroughs.
2. *Essay*:—The Judicial Power of the House of Lords. Dec. 15th.
   Stubb's Constitutional History of England, Chap. XX.
   Anson's Law and Custom of the Constitution, Chap. X.
   Pike's Constitutional History of the House of Lords.
   Round's Feudal England, Part I.
3. *Essay*:—The English Manor and Manorial Courts. Feb. 1st.
   Vinogradoff's Villainage in England.
   Maitland's Select Pleas in Manorial Courts, Selden Society, Vol. II.

4. *Essay:*—Development of English Law down to the Tudors. March 7th.

Pollock and Maitland's History of English Law.
Sir James Stephen's Introduction to Commentaries on the Laws of England.
Phillips' Englische Reichs and Rechtsgeschichte, including Glanvils Tractatus de Legibus regni Angliae.
Stubb's Constitutional History.

Final.

Students in Final Honours are required to write a Thesis on some subject immediately connected with the Honour Course. They are allowed to choose their subjects, which, however, must be submitted to the Professor for his approval. The writer of the Thesis must show that he has consulted original authorities. The subjects selected should be submitted to the Professor's approval as early as possible. The Thesis is to be given in by March 1st.

Besides the Essays mentioned, frequent exercises will be prescribed in both Honour and Pass Classes, based on the text-books, which the Tutor will carefully examine and submit to the Professor, and notes and suggestions will be offered which will afford assistance to the student. A fee of $3.00 for the Junior Class, and $5.00 for the Senior and Honour Classes, payable with the Registration fee not later than the 17th October, is required.

The books mentioned in connection with the prescribed essays are suggested as easily procured, and at little cost, but others of equal value may be substituted.

MENTAL AND MORAL PHILOSOPHY.

Professor of Moral Ppilosophy—John Watson, M.A., LL.D.
Professor of Mental Philosophy S. W. Dyde, D.Sc., LL.D.
Fellow in Moral Philosophy—J. M. McEachran, M.A
Fellow in Mental Philosophy—R. A. Wilson, M.A.

Mental Philosophy—Professor Dyde.

This class is divided into two parts, *(a)* The study of Systematic Philosophy, and *(b)* The study of a special period of Philosophy.

(a) Lectures on the method and aim of Philosophy. Outline of Ethics and Psychology.

Books recommended to be read:

Mackenzie's Outline of Metaphysics and Manual of Ethics.
Stout's Manual of Psychology.
Palmer's, The Field of Ethics.

(b) The History of Greek Reflection. Study of Plato's Theætetus and Aristotle's Ethics (Peters' or Welldon's translation.)

Books recommended to be read:

Plato, Republic; Wallace, Epicureanism.
Attendance and exercises are compulsory.

MORAL PHILOSOPHY—Professor Watson.

Text-book: Watson's *Outline of Philosophy with Notes Historical and Critical.* Supplementary Lectures, Tuesday and Thursday. Attendance and exercises are compulsory.

NOTE,—Candidates in Mental and Moral Philososhy, who do not pass the April or supplemental examination, must in the session in which they desire again to try the examination, write the essays prescribed for extra-mural students, hand them in to the Tutor for examination and correction, and pay to the Registrar the tutorial fee of $5.

SPECIAL VOLUNTARY CLASS, 1905-6—Professor Dyde.

A special course of lectures on Aesthetics will be given one hour a week, free and open to all students in any of the faculties who present a class card. The hour will be arranged for and announced at the beginning of the session.

For Extra-Mural Students.

MENTAL PHILOSOPHY.

Students are expected to show familiarity with the substance of the books mentioned below. They are recommended to take up the work in the following order:

1. Schwegler, History of Philosophy, XI-XV
   Plato, Theætetus (Dyde's Translation).
   Plato, Republic, Bks. I, II
   Essay for 15th Oct.:—The relation of Plato to the Sophists.
2. Plato, Republic, Bks. III, VII.
   Schwegler, History of Philosophy, XIV.
   **Essay* for 1st Nov.:—Plato's Theory of Education.
3. Aristotle, Nichomachean Ethics (Peters' Translation.)
   Schwegler, History of Philosophy, XVI.
   Essay for 21st Dec.:—The relation of Aristotle's Ethics to his Psychology.
4. Schwegler, History of Philosophy, XVII-XXI.
   Capes Stoicism (New York; Pott, Young & Co.)
   Wallace, Epicureanism.
   Essay for 1st Feb.:—Stoicism and Epicureanism.
5. Schwegler, History of Philosophy, XXII-XXVI.†
   Essay for 15th February.:—The Principles of the Cartesian Philosophy.

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*Nettleship's article on "Plato's Theory of Education" in Hellenica (Rivington's) is very valuable, but a knowledge of it will not be required.

†See also Caird's article "Cartesianism," in the Encyclopædia Britannica.

6. Schwegler, History of Philosophy, XXVII-XXXV.
Fraser, Selections from Berkeley.
Fraser, Berkeley (Blackwod's Philosophical Classics.)

Essay for 14th March.:—The development of the Philosophy of Berkeley.

For the examination, correction and return of the essays, a Tutor's fee of $3 is charged. The essays are to be sent to the Tutor and the fee to the Registrar.

MORAL PHILOSOPHY—Professor Watson.

Students will be examined upon Watson's "Outline of Philosophy, with Supplementary Notes, Historical and Critical," and "Hedonistic Theories." Weekly exercises will be prescribed, covering the whole of this work. These are compulsory and they will be examined and corrected by the Tutor, under supervision of the Professor. To compensate the Tutor, a special fee of $5.00 is charged, which must be sent to the Registrar at the time of Registration. The first exercise must be sent in by the middle of October.

HONOURS.

Preliminary —Professor Watson.

Critical Study of the Philosophy of Kant.
Text-books :—Watson's Selections from Kant, and Caird's Critical Account of the Philosophy of Kant.

Final.

Students desiring to write for Honours in Latin, Greek, French, German, English, History or Political Science, may complete their Honour Course by taking any one of the following departments :

A.—FIRST DEPARTMENT.

Critical study of the Philosophy of Kant. (See Preliminary Honour Class). Professor Watson.

Special Classes for 1905-1906.

Critical study of Hegel's Wissenschaft der Logik and Green's Prolegomena to Ethics. Professor Watson.
Lectures on the Principles of Pyschology. Professor Dyde.
Essays for the Class of English Philosophy.

15th Nov.: Relation of Locke to Hobbes.
20th Dec.: Green's Analysis of Locke. (Green's Introduction to Hume).
7th Dec.: Spencer's Unknowable. (Spencer's First Principles. Caird's Evolution of Religion, vol I.)
14th March: Bradley's Interpretation of the Absolute. (Bradley's Appearance and Reality).

NOTE.—As a substitute for the essays required in this and the other departments a more comprehensive essay, not less than 40 pages of foolscap in length, may be offered.

Candidates will be examined on the following works:

Kant, as in Preliminary Honour Class.
Bacon, Novum Organum.
Hobbes, Leviathan.
Locke, Essay on the Human Understanding.
Hume, A Treatise on Human Nature.
Mill's Logic, Examination of Hamilton and Utilitarianism.
Spencer's First Principles, Data of Ethics.
Green's Prolegomena to Ethics.

B.—SECOND DEPARTMENT.

Critical Study of the Philosophy of Kant. (See Preliminary Honour Class.) Professor Watson.

Special Classes for 1805-1906.

Lectures on the Philosophy of Plato and Aristotle. Prof. Watson.
Greek Thought with special reference to Plato's Theætetus, Sophist and Laws. Prof. Dyde.
Essays for Class in Plato:

15th Nov.: The Socrates of Plato and the Socrates of Xenophon. (Plato's Dialogues, Xenophon's Memorabilia)
20th Dec.: The Sophistic Conception of the State. Plato's Protagoras and Republic II, Aristotle's Politics I.)
7th Feb.: Plato's Proof of the Existence of God (Republic II, III, Laws X-XII.)
14th March: Aristotle's Definition of Tragedy. (Aristotle's Poetics, Bosanquet's History of Aesthetic.)

Candidates will be examined on the following works:

Kant, as in Preliminary Honour Class.
Plato, Theætetus, Republic.
Aristotle, Metaphysics.
Green's Prolegomena to Ethics.

Books recommended to be read:

Campbell, Translation of Aeschylus; Whitelaw, Translation of Sophocles; Way, Translation of Euripides; Butcher, Aristotle's Poetics; Bosanquet History of Aesthetic; Pater, Plato and Platonism; Wallace, Epicureanism; Maier, Die Syllogistik des Aristotles.

C.—THIRD DEPARTMENT.

Critical Study of the Philosophy of Kant. (See Preliminary Honour Classes.) Professor Watson.

Special Classes for 1905-1906.

Critical Study of Hegel's Wissenschaft der Logik and Green's Prolegomena to Ethics. Professor Watson.

Examination of Hegel's Philosophy of Right. (Dyde's Translation.) Professor Dyde.

Essays for Class in Hegel's Phil. of Right :

15th Nov. : Hegel's Theory of Crime and Punishment. (Phil. of Right, pp. 90-103 ; Bosanquet, chap. VIII.)

20th Dec : Time and Dialectic. (Phil. of Right, sections 3, 341-360, etc.)

7th Feb : The Nature of Evil. (Phil. of Right, section 140.)

14th March : Religion and the State. (Phil. of Right, section 270.)

Candidates will be examined on the following works :

Kant, as in Preliminary Honour Class.
Descartes, Discourse on Method and Meditations.
Leibnitz, Monadology.
Spinoza, Ethica, De Intellectus Emendatione.
Hegel, Wissenschaft der Logik, Philosophy of Religion, Philosophy of Right.
Green's Prolegomena to Ethics.

Books recommended to be read :

Caird, Hegel ; Wallace, Hegel's Philosophy of Mind, Prolegomena to the Study of Hegel's Philosophy.

MENTAL AND MORAL PHILOSOPHY.

Students desiring to write for Aonours in Mental and Moral Philosophy may take A and B, A and C, or B and C.

POLITICAL SCIENCE.

PROFESSOR—Adam Shortt, M.A.
TUTOR—J. A. Donnell, M.A.

ECONOMICS.

The lectures will include a discussion of the general principles of Political Economy.

Text-book for general reference : Gide's Principles of Political Economy.

POLITICS.

The lectures will include a critical examination of the leading theories of the State, and a discussion of the nature of Social and Political Relations.

In both classes essays will be required.

Economics and Politics may be taken during the same session.

For Extra-Mural Students.

Economics.

Candidates will be examined on the following books:
Fetter's Principles of Economics.
Price's English Commerce and Industry.

Essays during Session 1905-1906.

The character of the Mercantile system; Price, chaps. 7 and 8.

The relation of human wants to economic goods; Fetter, Division A.

The nature and function of modern capital; Fetter, Part I, Division C.

The wages system, its rise and present condition; Price, chap. IX.; Fetter, Part II, Division A.

Money and Credit and their relative functions in modern trade; Fetter, chaps. 45 to 50.

The causes and effects of industrial combinations; Fetter, Part II, Division B.

The functions and regulation of railroad corporations; Fetter, chaps. 54, 55.

A fee of $3.00 is required.

Politics.

Candidates will be examined on the following books:
Aristotle's Politics, Weldon's Translation, Bks. I, III, IV, V.
Rousseau's Social Contract.
Leroy Beaulieu, The Modern State.

Essays during Session 1905-1906.

A comparison of the views of Aristotle and Rousseau as to the origin of the state. Politics, Book I; Social Contract, Book I,

Aristotle's conception of the good citizen. Politics, Book III.

A general examination of Aristotle's views on education. Politics, Books, IV, V.

A general examination of Rousseau's view of the state.

The relations of individuals to society. Leroy Beaulieu; Rousseau.

A comparison of the ancient and modern state.

The function of the state. Leroy Beaulieu,

A fee of 3.00 is required.

Honours.

Preliminary.

This class will meet for the discussion of Economic, Social and Political Principles, and for the critical reading of portions of the works prescribed for Honours.

A course of lectures will be given on Canadian Economic and Political History.

Candidates will be examined on the following books:

Economics.

Smith's Wealth of Nations.
Mill's Principles of Political Economy.
Nicholson's Principles of Economics, vol. I.
Ingram's History of Political Economy.

Politics.

Maine's Ancient Law.
Wilson's The State; Historical and Practical Politics.
Traill's Central Government. } English
Chalmer's Local Government. } Citizen
Walpole's Electorate and Legislature. } Series.
Lowell's Governments and Parties in Continental Europe.

Final.

This class will meet for the further discussion of Economic, Social and Political Principles.

Candidates must show familiarity with the substance of the following books:

Economics.

Cunningham's Western Civilization in its Economic Aspects.
Scott's Money and Banking.
Seligman's Essays in Taxation.
Brentano's, The Relation of Labour to the Laws of to-day.
Greene's Corporation Finance.
Johnson's Railway Transportation.

Politics.

Bluntschli's Theory of the State.
Holland's Elements of Jurisprudence.
Arnold's Culture and Anarchy.
Rae's Contemporary Socialism.

An essay embodying independent work in some section of the Honour Course will be required from every candidate for Honours.

Extra-mural students are required to pay a fee of $5.00 for either the Preliminary or Final Honour Class.

MATHEMATICS.

PROFESSOR—N. F. Dupuis, M.A., F.R.S.C.

ASSISTANTS—J. Matheson, M.A., A. Kennedy, M.A.

TUTOR—R. Anning.

JUNIOR CLASS.

The theory and practice of *Algebra* to the Binomial theorem inclusive. Dupuis' Algebra—the first thirteen chapters, omitting chapter XI.

Geometry of the point line and circle in the plane. Parts I and II, and selections from Parts III, Dupuis' Plane Geometry.

Trigonometry Elementary Principles, (2nd term.)

Besides numerous class-exercises, periodical written exercises will be required.

SENIOR CLASS.

Algebra—Dupuis' Algebra, from the twelth chapter to the end.

Geometry—Part III of Dupuis' Plane Geometry, and the first 131 pages of Dupuis' Solid Geometry.

Trignometry—Preceeding De Moivre's theorem.

Besides numerous class exercises, periodical written exercises will be required.

HONOURS.

Candidates who matriculate with Honours in Mathematics are not required, in their subsequent Honour Course, to take either the Junior or the Senior Class, but they are advised to read the Geometry of the Junior Class.

Candidates who did not matriculate with Honours must take the Junior Class as preparatory to their Honour work, but they need not take the Senior Class inasmuch as the work of this class is covered in the first group of Honour subjects.

Group I.

1. *Synthetic Modern Geometry*—Dupuis' Geometry, parts III, IV, V.
2. (*a*) *Algebra*—Dupuis' Algebra, from chapter XI to the end. Reference to Hall and Knight's Higher Algebra, the first twenty-seven chapters.
   (*b*) *Plane Trigonometry*—Preceding De Moivre's theorem, with various problems and applications. Hobson and Jessop's Plane Trigonometry, Lachlan and Fletcher.
2. Elementary Co-ordinate Geometry, through the Conics. Lectures, supplemented by examples from Loney's Co-ordinate Geometry and other sources.

Group II.

4. *Synthetic Solid Geometry*—Dupuis' Solid Geometry.
5. (*a*) *Algebra*—Hall and Knight's Higher Algebra from chapter XXVII to the end.

(*b*) *Trigonometry*, following De Moivre's theorem. *Quaternions.*

6. *Elementary, Differential and Integral Calculus*—Reference to Edwards, Taylor, Gibson and Williamson.

Groups III and IV.

A
7. *Analytic Solid Geometry*—Aldis Geometry, supplemented by lectures and examples, with reference to Aldis' Smith, Salmon, &c.
8. (*a*) *Higher Differential Calculus*—Edwards.
(*b*) *Integral Calculus*—Williamson and Edwards.
9. (*a*) *Finite Differences*—Given by lectures and syllabus.
(*b*) *Differential Equations*—Johnson.

B
10. *Spheric Trigonometry, Geodesy and Astronomy.* Lectures. and examples, with references to Barlow and Bryan's Mathematical Astronomy.
11. *(a) Determinants and Theory of Equations.* Consult Weld's Determinants.
12. *Higher Conics and Curves.* Salmon.

Group I taken as a part of a Pass Course will count for Senior Mathematics and one of the optional subjects in Courses I and II as given on pages provided that in his examination on this group the candidate makes at least 33 per cent. on each subject, and an average of 50 per cent. on the whole group.

Candidates for Honours must make a minimum of 40 per cent. upon each subject of group I, and 60 per cent. upon the whole group, at one examination, after which no further examination on this group will be required.

Candidates for Honours must make at least 50 per cent. upon the subjects numbered 4, 6 and 10, but honour standing will be determined by the examination on the subjects numbered 5, 7, 8, 9, 11, and 12.

The subjects of Groups II, III, and IV must be taken in not more than two examinations, and at any examination a candidate may offer any subject upon which he has failed at a previous examination. But 5, 7, 8, 9, 11 and 12 must be taken at the final examination.

A and B of Group III will be taken up in alternate years. A in 1905-6.

Candidates are recommended to follow the order of subjects as indicated above, as nearly as may be practicable.

Extra-mural students must pay for tutorial assistance—$3.00 for each Pass Class or $5.00 for any group of the Honour Classes.

They must also supply themselves with the University Book of Exercises.

ARTS TIME-TABLE FOR CLASSES IN MATHEMATICS, 1905-6.

	X.	XI.	III.	IV.
Monday,		Syn. Solid Geometry *n*	Junior. *n*	Syn. Modern Geometry. *s*
Tuesday,	Senior. *s*	Algebra and Trig. of Gr. II. *s*		Algebra and Trig. of Group I. *s*
Wednesday,	Diff. Equt. Finit Diff. *s*	Analytic Solid Geometry. *n*	Junior. *n*	
Thursday,	Senior *s*	Calculus of Group II. *s*	El. Co-ord Geometry and Conics. Group I. *s*	
Friday,	Calculus II. *n*		Junior. *n*	

n means that the class meets in the north room, and *s*, that it meets in the south room.

PHYSICS.

PROFESSOR—D. H. Marshall, M.A., F.R.S.E.

ASSOCIATE PROFESSOR—N. R. Carmichael, M.A.

LECTURER—W. C. Baker, M.A.

TUTORS—G. E. Pentland, B.A. and W. F. Brownlee.

JUNIOR CLASS.

Lectures and demonstrations are given in the following subjects:

Properties of Matter.

Extension — Inertia — Mass — Density — Gravitation — Specific weight—Weight of Gases—Molecular forces—Energy.

Dynamics.

Kinematics—Statics of solids and fluids—Kinetics of solids and fluids.

Heat.

Thermometry—Laws of expansion — Calorimetry — Change of state—Hygrometry—Transference of heat—Measurement of the mechanical equivalent.

Electricity and Magnetism.

Fundamental principles of electrostatics—Potential—Static machines and measuring instruments. Phenomena of ionization—Conduction of electricity through solutions—Theory of the voltaic cell. General phenomena of magnetism—Terrestrial magnetism—Molecular theories—Hysteresis. General properties of electric currents and electromagnetic action—Induction—Generators, motors and measuring instruments—Simpler alternating current phenoma.

Sound.

Nature and propagation of sound—Pitch—Musical scales—Vibrations of rods, strings, plates, and columns of gas—Interference—Beats—Resonance—Timbre—Physical basis of harmony.

Light.

Propagation of waves—Reflection—Refraction—Prisms, lenses, and optical instruments—Spectrum analysis—Measurement of wave lengths—Polarization and double refraction.

Text-books: Marshall's Introduction to the Science of Dynamics.
Watson's Text-book of Physics; selected portions corresponding generally with those prescribed below for extra-mural students.
Carmichael's Physical Experiments.

Weekly exercises are given throughout the session.

A knowledge of Algebra, Geometry, and the rudiments of Trigonometry on the part of the student is assumed.

Students are required to spend two hours a week in the Laboratory doing experimental work. Hours for this purpose will be arranged as far as possible to suit the students. A special Laboratory ticket is required.

Senior Class.

The work of this class is largely a continuation of that done in the Junior class. The same text-books are used.

Weekly exercises are given throughout the session.

Students are required to spend two hours a week in the Laboratory doing experimental work. A special Laboratory ticket is required.

Students who are allowed to take the Senior Class without having attended the Junior are strongly recommended to attend the Dynamics of the Junior Class.

For Extra-mural Students.

Extra-mural students pay $3.00 for tutorial assistance with each class. They are expected to do the weekly exercises prescribed. They should also write to Professor Carmichael stating what facilities, if any, they have for making experiments. Experiments will be prescribed to suit their circumstances as far as possible.

Under special circumstances a limited amount of apparatus may be sent from the Laboratory upon conditions to be arranged.

Junior Class.

The portions of the text-books to be studied in connection with this Class are:

Marshall's Dynamics, Chaps. I to X, XV, XVI, XVIII.

Watson's Text-book of Physics, Book II, Chaps. I, II, III to end of 228, VI to end of 251. Book III omitting sections 276, 277, 278, 279, 285, 286, 291 A, 298, 301, 302, 305, 308, 309, 310, 311,. Book IV, Chap. I omitting 337 and 339; II omitting 347, III omitting the mathematical calculations of 348 and 349, V to end of 365, VI, IX, X omitting 403, 404, 405. Book V omitting sections 426, 427, 428, 453, 455 to 465 inclusive, 499, 500, 512, 513, 532, 536, 537 542, 543, 545 546, 548, 549 and omitting Chapters XVII, XVIII, XIX, XX.

Carmichael's Physical Experiments, selected experiments.

Senior Class.

The portions of the text-books to be studied in connection with this Class are:

Marshall's Dynamics, Chaps. XI to end.

Watson's Text-book of Physics, selected portions to be presented at the beginning of the session.

Carmichael's Physical Experiments, selected experiments.

Honours.

The experimental work of the Honour Classes must be performed at the University.

Preliminary.

Students should take Group I of Honour Mathematics before entering this class. They are also required to have done the experimental work of both Junior and Senior Classes.

Dynamics.

Marshall's Dynamics, Part III.

Hicks Elementary Dynamics of Particles and Solids, Chap. VIII to end.

Besant's Hydrostatics.

Heat.

Clerk Maxwell's Theory of Heat.

Electricity and Magnetism.

J. J. Thomson's Elements of the Mathematical Theory of Electricity and Magnetism.

Experimental work.

Carmichael's Physical Experiments, selected experiments illustrating the subjects treated in the lectures. A Laboratory ticket is required.

Final.

1. Experimental work in the Laboratory.

Honour students are expected to spend a large portion of their time in the Laboratory. In the first year their work will consist of a selected course of advanced experiments in Mechanics, Heat, Light, Sound, Magnetism and Electricity; in the second year, of a small number of more elaborate measurements intended to acquaint them with some of the methods and instruments used in modern research. A special Laboratory ticket is required.

A
2. *Analytical Statics.*
Todhunter's or Minchin's Analytical Statics.
3. *Electricity and Magnetism.*

B
4. *Dynamics of a Particle and of a rigid Body.*
Tait and Steele's Dynamics of a Particle.
Pirie's or Loudon's Rigid Dynamics.
5. *Physical Optics.*
6. *Heat.*

Groups A and B are lectured upon in alternate sessions. Group A in session 1905-6.

HONOUR EXPERIMENTAL PHYSICS.

The work required under this title in Honour Course C (1) and Specialists' Course VIII (6) consists of:

1. The Laboratory work of the Preliminary and Final Honour Physics classes (omitting portions which involve advanced mathematical theory).

2. Selected parts (not requiring advanced mathematics) of the courses of lectures given in the Honour Classes.

3. Reading of prescribed articles from magazines and books relating to the experiments performed.

Extra-Mural.

The principal Physical Journals and books relating to the Lectures and Laboratory work are kept in the Library of the Physics Department where they may be freely consulted by the students.

BOTANY.

PROFESSOR—Rev. James Fowler, M.A.
TUTOR—

Pass Class.

Class meets at 10 a.m. Lectures embrace the following subjects:

General morphology of the plant body, segmentation, symmetry, arrangement of lateral members of the common axis, branch systems.

Special morphology of the members, (1) Roots, different forms, duration, parasites; (2) Stems, their forms, climbing stems, &c.; (3) Leaf, phyllotaxis, venation, vernation, forms; (4) Trichomes, &c.; (5) Flowers; (6) Fruits; (7) Arrangements for cross-fertilization, close-fertilization.

Anatomy of plants (Histology), cell, cell-wall, protoplasm, Chlorophyll, starch, etc.; formation of new cells, tissues, system of tissues.

Study of specimens belonging to leading orders.

Text-Books:—Spotton's Structural Botany and Wild Plants of Canada, Coulter's Plant Relations.

HONOURS.

Preliminary.

The class meets daily during the session at 11 a.m.

Careful study of Phænogamous plants of Canada, embracing about three hundred species, representing all available orders.

The subjects of Morphology and Histology are carefully studied with the aid of models, diagrams and microscopic specimens.

Physiology, elementary constituents, plant-food, absorption, metabolism, respiration, transpiration, movements of water and gases, chemical process, root pressure, bleeding, growth, effects of moisture, temperature, light, &c.

Laboratory work daily, consisting of study of specimens.

Lectures on Ecology.

Essays are required on prescribed subjects.

Books for study and Laboratory work.
Gray's Structural Botany.
Bessey's Botany.
Gray's Manual.
Atkinson's Elementary Botany.
Barnes Plant Life.
Coulter's Plant Structures.
Clark's Practical Methods in Microscopy.

Final.

This class meets daily during the session at 11 a.m.

The first half of the session is devoted to the more extended and minute study of (1) Morphology, and (2) Histology. The subject of Physiology is taken up during the second half.

Practical work in the laboratory consists in the careful examination of (1) Algae ; (2) Fungi and Lichenes ; (3) Bryophyta ; (4) Pteridophyta ; (5) Gymnospermae ; (6) Gramineæ ; (7) Cyperaceæ.

Essays are required on prescribed subjects.

Vines' "A Student's Text-book of Botany" must be read for examinations.

Books for laboratory work and reference :
Gray's Manual.
Sach's Text-book of Botany.
Darwin and Acton's Physiology of Plants.
Lesquereux and James' mosses of N. America.
Tuckerman's Lichens.
Strasburger and Hillhouse's Practical Botany.
Arthur, Barnes and Coulter's Plant Dissection.
Kerner's Natural History of Plants.
Honour examinations are held at the University only.

ANIMAL BIOLOGY.

PROFESSOR—A. P. Knight, M.A., M.D.
LECTURER—T. F. Etherington, M.D., C.M.

Students in medicine are required to take the class in elementary morphology.

Students in Arts have the option of taking either the class in elementary morphology, or the class in elementary physiology and hygiene.

Students in arts who intend subsequently to study medicine are advised to take the pass and honour classes, and thus complete their physiology and histology during their undergraduate course. Besides the special course for B.A., M.D., the honour course in science, C

number 2, (with Animal Biology) page 55, or the specialists' course in science, page 58, is suitable for this purpose. The course in sanitary engineering for the degree of B.Sc. in practical science, is also suitable for medical students.

ELEMENTARY MORPHOLOGY.

Lectures or demonstrations will be given tri-weekly at 9 a.m.

The lectures treat of protoplasm, cells, cell divisons, reproduction, early stages of development, tissues, organs, differences between animals and plants, general view of the invertebrata and of the vertebrata, organic evolution, every-day lives of animals.

The laboratory work consists of such dissections and demonstrations as will elucidate the subject of the lectures. The lectures are illustrated by diagrams, charts, and lantern transparencies. Text-books, General Zoology by C. W. Dodge (American Book Co.)

The senior leaving examination in biology of the Education Department is accepted in lieu of attendance and examination in this class.

Extra-Mural Students.

Extra-mural students and students who do not attend the class lectures and demonstrations are required to do the practical work outlined for Honour Matriculation in Zoology. They will be examined on Professor Ramsay Wright's *High School Zoology*.

ELEMENTARY PHYSIOLOGY ANDHYGIENE.

Lectures will be given on Tuesdays and Thursdays at 10 a.m. on physiology, and once a week, at 11 a.m. on hygiene.

The lectures will treat of the functions of bones, joints and muscles; the relation of muscle and nerve; the work of blood and lymph; the circulation of these tissues; diet, digestion, absorption, metabolism, respiration and animal heat; excretion; nervous system and special senses, personal, household, municipal and national hygiene.

Honours.

Candidates who have not matriculated with honours in biology and who intend to take an honour course in the subject must first take the pass class.

The course in comparative and practical anatomy extends over two years, and the work of each year is read in class every alternate session.

Preliminary honours are awarded on the honour papers of the first session in honours. The class in elementary physiology and hygiene is part of the preliminary honours' course.

Final honours are awarded on the honour papers of both sessions taken together.

The lectures and demonstrations in "physiology" and "histology" are attended simultaneously by students in medicine and arts. The honour work in physiology for the second year lasts during the whole session.

Graduation in honours in the department of biology lessens, by one year, the length of the course required by the Medical Council of Ontario.

Session 1905-1906, 12 M. to 1 P.M.

Biology of Vertebrata.

Study of Types of the different divisions of Vertebrata.
Histology and Embryology.
Physiology.
Daily laboratory work.
Dissections of balanoglossus, a tunicate, amphioxus, a fish, frog, bird and mammal.

Books for study and laboratory work :

Text-book of Physiology, 2 Vols., edited by E. A. Schafer LL.D.
Halliburton's Hand-book of Physiology, 18th edition.
Claus and Sedgwick's or J. Arthur Thompson's Zoology.
Huxley and Martin's Practical Biology.
Parker's Zootomy.
Brook's Hand-book of Invertebrate Zoology.
Weidersheim's Elements of Comparative Anatomy.
Foster & Langley's Histology, or Dr. Stirling's.
Balfour & Foster's Elements of Embryology.
Darwin's Origin of Species.

SESSION 1906-1907, 12 M. to 1 P.M.

Biology of Invertebrata.

Examination of typical specimens of the different classes.
Histology and Embryology.
Physiology.
Daily laboratory work.
Dissection of all the forms in Huxley & Martin's text-book, (last edition,) and in addition, a grasshopper, a star fish, or sea-urchin, squid, sponge, and hydroid.

The Honour examinations in this department are held at the University only.

CHEMISTRY.

PROFESSOR—William L. Goodwin, D.Sc., Edin.

LECTURERS—John Waddell, B.A., D.Sc., Ph.D., and C. W. Dickson, M.A., Ph.D.

DEMONSTRATORS—Isaac Wood, M.A., M.D. ; F. H. McDougall, M.A.

STUDENT ASSISTANTS—W. E. H. Whinton, R. D. Guy.

JUNIOR CLASS.

Lectures: Monday and Tuesday at 11 a.m.

Laboratory: Wednesday at 11 a.m.

Chemical Species—Crystals and Crystallization—Chemical Change—Laws of Combination—Combining Weights—Relations of Heat to Chemical Changes—Notation—Equations—Nomenclature—Volume Relations of Gases in Chemical Change—Volume Formulae—Molecular Weights—The Atomic Theory—Atomic Weights—Descriptive Chemistry of the Commoner Elements and their Compounds—The Periodic Law—Properties of Solutions—Electrolysis—Spectrum Analysis—Chemical Calculations.

Books: Shenstone's Inorganic Chemistry (Edward Arnold, London); Waddell's Arithmetic of Chemistry, (The Macmillan Company, N. Y.), Chapters I-V.

Beginners are advised to read Walker's Elementary Inorganic Chemistry (G. Bell & Sons, London).

Senior Class.

1. Organic Chemistry—Thursday at 11 a.m.
2. Chemical Laws and Theories—Friday at 11 a.m.
3. Special Chemistry of the Metals, their occurrence in nature, reduction and uses—Tuesday at 3 p.m.

(2) with either (1) or (3) is required.

Books: Van Deventer's Physical Chemistry (J. Wiley & Sons).
Cohen's Theoretical Organic Chemistry (Macmillan & Co).
Richter's Inorganic Chemistry, Chapters on Metals (P. Blakiston's Son & Co.)
Waddell's Arithmetic of Chemistry, Chap. VI to the end.

Syllabus of Organic Chemistry.

Calculation of Empirical formulae from percentage composition—Determination of molecular weight from vapour density—Isomerism—Constitution of organic compounds—Rational formulae—Homologous series—*Radicles*—Classification—Optically active compounds—*Paraffins*, methods of preparation, properties, nomenclature and isomerism—*Olefines*, methods of preparation and properties—*Acetylene Series—Monatomic saturated alcohols*, properties, methods of preparation and isomerism—Methyl and ethyl alcohols—Ethers, simple and mixed, methods of preparation and properties—Ethyl ether—*Thio-alcohols* and *thio-ethers—Compound ethers* or *esters*, preparation and properties—*Esters of nitrous acid—Nitro paraffins—Sulphonic acids—Cyanides and isocyanides—Amines—Hydrazines—Phosphines — Arsines — Metallic Compounds of the alcohol radicles—Aldehydes* —Formic aldehyde—Acetic aldehyde—Chloral and chloral hydrate—*Ketones*—Acetone *Fatty acids* - Formic acid—Acetic acid—Fats and oils—Soaps—*Hydroxy acids (oxyacids)*—Lactic acid—*Chlorides of the acid radicles—Acid anhydrides—Amides*—Glycol- Glycerine—Nitroglycerine — Oxalic acid — Tartaric acid — Citric acid —*Cyanogen compounds*—Cyanogen—Hydrocyanic acid—Potassium cyanide—*Double Cyanides*—Potassium ferrocyanide—Potassium ferricyanide—Halogen compounds of cyanogen—Cyanic acid—Potassium cyanate—Ammonium cyanate—Ethyl isocyanate—Potassium thiocyanate Ammonium thiocyanate—Ethyl thiocyanate—Allyl isothiocyanate— Urea—Carbamic acid —Ammonium carbamate—Thiocarbonic acids—Thiocarbamide—*Carbohydrates—The grape sugar group—The cane sugar group—The cellulose group*—Grape sugar—Fruit sugar—Cane sugar—Milk sugar—Malt sugar —Cellulose—Starch—Gums—Dextrine—*Benzene Derivatives*—Differences between aromatic and fatty hydro-

carbons—Isomeric relations—*Ortho, meta and para-derivatives*—Constitution of benzene—Occurrence of benzene derivatives—*Modes of formation and properties of benzene hydrocarbons*—Benzene—Toluene—Xylenes—Mesitylene—*Halogen substitution products — Nitro-substitution products — Amido-derivatives— Primary monamines*—Aniline — Acetanilide—*Diazo-compounds Azo-compounds—Hydrazines—Phenols—Monatomic phenols*—Carbolic acid—*Cresols*—Hydroquinone—Pyrogallol—Quinone—*Aromatic Alcohols—Aromatic acids*—Benzoic acid—*Phthalic acids*—Petroleum—Wood tar—Coal tar.

The subjects in italics are to be studied not too much in detail, but with a view of observing the relations to each other of the classes of compounds and the commoner general methods of formation.

Students intending to proceed to Honours in Chemistry may begin Qualitative Analysis in the year in which they take Senior Chemistry.

HONOURS.

Preliminary.

(May be taken as a Pass Class.

1. Organic Chemistry.

The detailed study of selected groups of carbon compounds and their preparation in the Laboratory. (1. *Organic Chemistry* of the Senior Class must be taken along with this, if not already taken. A knowledge of nos. 1, 2 and 3 of the Senior Class is required for Honours).

Wednesday, 2 to 5 p.m.

2. Industrial Chemistry (or *Physiological and Pathological Chemistry). Monday and Thursday at 3 p.m.
3. Crystallography (Elementary) See Mineralogy (First Term).
4. Qualitative Analysis and Blowpiping.
5. Qualitative Analysis of Minerals, &c., or *Urinalysis, &c. (See page

Students are required to complete the first 25 introductory exercises in Noyes' Qualitative Analysis, and to hand in their note-books for inspection. This must be done before begining the analysis of unknown substances.

Books:

Cohen's Practical Organic Chemistry for advanced students (Macmillan & Co., London).

Simon's Physiological Chemistry (Lea Brothers & Co., Philadelphia).

*This option is for students who intend to take a course in Medicine.

Williams' Crystallography (Henry Holt & Co.)
Arthur S. Noyes' Qualitative Analysis (The Macmillan Co., N.Y.)
Thorp's Industrial Chemistry (The Macmillan Co., N.Y.)

Final.

6. Physical Chemistry: Kinetic Theory of Gases; Properties of Solutions; The Periodic Law; Thermochemistry; Electrochemistry; Photochemistry.
   Friday at 3 p.m. (First Term), and Wednesday and Friday at 3 p.m. (Second Term).
7. History of Chemistry
   Tuesday at 3 p.m. (Second Term).
8. Quantitative Analysis.
9. Assaying.

Subjects (1), (2) and (3) must be taken at one examination, but may be taken without (4) and (5).

Subjects (6) and (7) must be taken at one examination, but may be taken without (8) and (9)

Books:

Walker's Physical Chemistry (Macmillan & Co.)
Ostwald's General Chemistry (Macmillan & Co.)
Meyer's Modern Theories of Chemistry.
Ladenburg's History of Chemistry (W. F. Clay, Edinburgh).
Rodwell's Birth of Chemistry (Macmillan & Co.)
Bolton's Quantitative Analysis (J. Wiley & Sons).
Furman's Manual of Assaying (J. Wiley & Sons).
Waddell's Arithmetic of Chemistry (The Macmillan Co.)

Syllabus of Quantitative Analysis and Assaying.

1. Barium Chloride—Ba, Cl, H_2 O
2. Magnesium Sulphate—Mg O
3. An Ammonium Salt—N H_3
4. A phosphate - P_2 O
5. Dolomite—Ca O, Mg O, Si O_2, Fe_2 O_3, C O_2
6. Coal—water, volatile matter, fixed carbon, ash.
7. Bleaching powder—available chlorine.
8. Iron ore—qualitative analysis; determination of Fe, Si O_2, S.
9. Pig iron—Si, P, Mn. C.
10. Zinc ore—Zn.
11. Lead ore—Pb.
12. Copper ore—Cu by electrolytic and cyanide methods.
13. Nickel ore—Ni by electrolytic method.
14. Silver coin—Ag by cupellation.
15. Pig lead—Ag and Au
16. Gold and silver ores Au and Ag by pot assay.
17. Silver ore—Ag by blowpipe assay.
18. Barite—Ba O, Sr O, S O
19. Bronze—Cu, Sn, Zn.

20. Alkalimetry—
21. Acidimetry—
22. Chrome iron ore $Cr_2 O_3$
23. Feldspar—$Si O_2$ $Al O_3$, Ca O, Mg O, $K_2 O$, $Na_2 O$
24. Titaniferous iron ore—$Ti O_2$, Fe, $Si O_2$, S, P, MnO, CaO, Mg O.
25. Arsenopyrite—As.

Syllabus of Industrial Chemistry.

Lixiviation, Levigation, Evaporation, Distillation, Sublimation, Filtration, Crystallization, Calcination, Refrigeration, Density, Water, Sulphur, Sulphuric Acid, Salt, Hydrochloric Acid and Sodium Sulphate, Soda, Chlorine, Fertilizers, Lime, Cement, and Plaster of Paris, Phosphorus, Arsenic Compounds, Sulphates, Pigments, Petroleum.

Nitric Acid, Ammonia, Potash. Glass, Ceramics, Bromine, Iodine, Water Glass, Peroxides, Oxygen, Cyanides, Carbon Bi-sulphide, Carbon Tetrachloride, Manganate s and Permanganates, Destructive Distillation of Wood, Illuminating Gas, Coal Tar, Vegetable and Animal Oils, Soap, Candles, Glycerine, Starch, Dextrine and Glucose, Cane Sugar, Fermentation Industries, Explosives, Textile Industries (Bleaching and Dyeing), Paper.

For Extra-mural Students.

Tutors are appointed to give assistance by correspondence to Extra-mural students taking classes in Chemistry, Mineralogy and Geology. The tutorial fee for any one of the three subjects is $5.00. The fees are to be paid by all the Extra-mural students taking these subjects. Assistance is given in both the practical and theoretical parts of the subject.

Extra-mural students are required to do promptly the work set by the Tutor and will not be admitted to examination until this work is completed.

Junior.

Books to be read:

Walker's Elementary Inorganic Chemistry (G. Bell & Sons, (London).

Shenstone's Inorganic Chemistry (Edward Arnold, London).

Waddell's Arithmetic of Chemistry (The Macmillan Co., New York), Chapters I-IV.

Senior.

Books to be read:

Van Deventer's Physical Chemistry (J. Wiley & Son, New York.)

Waddell's Arithmetic of Chemistry, Chap. VI to end.

Cohen's Theoretical Organic Chemistry (Macmillan & Co.) See syllabus.)

Richter's Inorganic Chemistry (P. Blakiston's Son & Co.,) Philadelphia). Chapers on Metals).

The work in *Cohen* and *Richter* is to be selected under the guidance of the Tutor.

For Students in Medicine.

First Year.

Monday and Tuesday at 11 a.m., and Thursday, 11 a.m. to 1 p.m. The Lectures of the Junior Arts Class with Laboratory practice.

Second Year.

Thursday and Friday, at 11 a.m.

Chemical Laws and Theories, and Organic Chemistry (Senior Arts Class).

Analytical Chemistry

N.B.—Before taking this class students must pass the examination in Junior Chemistry.

First Term.—Saturday, 10 a.m. to 1 p.m.

Systematic Testing of Chemical Substances.

Chemical Toxicology.

Second Term.—Saturday, 10 a.m. to 1 p.m.

Urinalysis.

Physiological Chemistry.

Analysis of Milk and Water.

Books :

Walker's Elementary Inorganic Chemistry (G. Bell & Sons, London).

Shenstone's Inorganic Chemistry (P. Blakiston's Son & Co., Philadelphia).

Waddell's Arithmetic of Chemistry.

Simon's Manual of Chemistry (Lea Brothers & Co., Philadelphia).

Irish's Qualitative Analysis.

The Urine, the Common Poisons and the Milk, by Professor J. W. Holland.

Leffman & Beam's Water Analysis.

Junior, Senior and Preliminary Honours of the Arts course cover all the Chemistry required of students of Medicine.

MINERALOGY.

PROFESSOR—William Nicol, M.A.

ASSISTANT—Leon H. Borgström, Ph.D.

DEMONSTRATOR—M. B. Baker, B.A , B.Sc.

Students in Mineralogy are expected to take part in the field excursions held during the Fall Term. The cost of the field work will not exceed five dollars.

Pass and Preliminary Honours may be taken in one year by students in Honours.

Divisions one and two of Pass Class are required of students in Geology.

Students intending to take Mineralogy are advised to take Junior Chemistry, Junior Physics, and the lectures on Crystallography before commencing it.

In addition to essays and correspondence extra-mural students are required to determine and describe the minerals in collections furnished by the demonstrator.

For extra-mural students a collection of wooden crystal models may be obtained for two weeks by depositing five dollars with the Registrar, to be refunded when the models are returned.

Each student in this department is supplied with a locked cabinet containing about 100 mineral specimens for which a cash deposit must be made and a receipt given, and an agreement made to return the minerals at the close of the session.

Examinations are held only at the University.

One of the rooms in connection with the Department of Mineralogy has been furnished as a study and consulting room for students in this department. The Professor or his assistant will be available for consultation at hours when classes are not being held. Systematic and illustrative collections of minerals, crystals and models are on exhibition.

The Department is furnished with a first class lantern and projection apparatus.

Books from the Library of the Department of Mineralogy and from the Professor's private library may be obtained by application to the Professor.

Pass.

1. Elementary Mineralogy.
2. Description and determination of the following minerals:

Diamond, graphite, native arsenic, native silver, native gold, native copper, stibnite, molybdenite, cinnabar, galenite, chalcocite, malachite, azurite, sphalerite, niccolite, smaltite, chloanthite, pyrrhotite, bornite, chalcopyrite, pyrite, marcasite, arsenopyrite, halite, fluorite, quartz and prin, vars, corundum, hæmatite, magnetite, chromite, pyrolusite, psilomelane, limonite, calcite, dolomite, siderite, orthoclase, plagioclase, pyroxene and vars, olivine, amphibole and vars, garnet, tourmaline, stilbite, analcite, natrolite, muscovite, biotite, serpentine, talc, sphene, zircon, staurolite, apatite, barite, celestite, gypsum, coal and vars.

Text-books: Dana's Minerals and How to Study Them, 2nd Ed. (Wiley & Son).

Crosby's Tables for the Determination of Common Minerals.

The class meets in the Mineralogy lecture-room of the Mineralogy-Geology building, at 9 a.m. on Mondays.

3. Elementary Crystallography.

A course of fifteen lectures delivered at the opening of the session at 1 o'clock p.m. on Mondays, Tuesdays, Wednesdays, Thursdays and Fridays.

Text-book: Williams' Crystallography (Henry Holt & Co).

4. Blowpipe Analysis—*(a)* A course of practical demonstrations to illustrate and explain the reactions in studying the chemical properties of minerals. *(b)* A practical class in which the experiments seen in the lectures are performed by the students.

Text-book: Brush & Penfield's Determinative Mineralogy and Blowpipe Analysis, 1899.

Books for Reference:

Cornwall's Translation of Plattner's Manual of Qualitative and Quantitative Analysis with the Blowpipe, 7th Ed. (Van Nostrand Co.)

Cornwall's Manual of Blowpipe Analysis (Van Nostrand Co).
Landauer's Blowpipe Analysis.
Endlich's Manual of Qualitative Blowpipe Analysis.
Moses & Parsons' Mineralogy, Crystallography and Blowpipe Analysis, 2nd Ed.

Students must supply their own blowpipe apparatus.

The class meets in the blowpipe lecture-room of the Mineralogy-Geology building, on Friday afternoons, from 1 to 3 o'clock.

Honours.

Preliminary.

(A knowledge of German is desirable.)

1. Systematic Mineralogy, illustrated by specimens, charts, lantern-slides, etc. Monday, 2 p.m.; Wednesday, 11 a.m. and Practical Class at hours convenient for members.

Text-book: Dana's Text-book of Mineralogy, 1904. (Wiley & Sons)

Books for Reference:

Moses' characters of crystals, 1899.
Miers' Mineralogy (Macmillan & Co.)
Van Horn's General and Special Mineralogy.
Naumann-Zirkel's *Mineralogie.*
Tschermak's *Mineralogie.*

2. Practical Crystallography.
Practical study of crystal forms by means of crystals, and wire and wooden models. Tuesday, 8 a.m. and Thursday, 10 a.m.

Text-book: Williams' Crystallography (Henry Holt & Co.)

3. Qualitative analysis of minerals by blowpipe and wet re-agents:—The course in Qualitative Analysis in connection with Preliminary Honour Chemistry and, in addition, the analysis of selected min

eral samples to be secured by the students individually from the Professor.

Lectures on Qualitative Analysis.

Text-book: Fresenius' Qualitative Analysis.

Books for Reference :

Ostwald's Foundations of Analytical Chemistry (Macmillan & Co.)
Menschutkin's Analytical Chemistry (Macmillan & Co.)

4. Essays on prescribed subjects.

Final.

1. Descriptive Mineralogy.
Description and classification of the commonly occurring minerals, special attention being given to Canadian ores and rock-forming minerals. Monday, 8 a.m. Attendance compulsory.

Text-book: Dana's System of Mineralogy, 6th Ed. (Wiley & Sons).

Books for Reference :

Chapman's Minerals and Geology of Ontario and Quebec, 3rd Ed. (Copp Clark Co.)
Commissioners' Report on Mineral Resources of Ontario, 1890.
Reports of Geological Survey. New series 1885-1904.
Foote's Catalogue of Minerals.

2. Determinative Mineralogy.
Practical instruction in the determination of minerals by means of the blowpipe and by field tests. Wednesday, 8-10 a.m.
Examination of specimens from cabinets. Thursday and Friday, 8 a.m. Attendance compulsory.

Text-books: Brush & Penfield's Manual of Determinative Mineralogy and Blowpipe Analysis (1899).
Crosby's Tables for the Determination of Common Minerals.
Eakle's Mineral Tables.

3. Quantitative Analysis of Minerals, (selected samples).

Text-book: Fresenius' Quantitative Analysis.
Lectures on Quantitative Analysis.

4. Economic Geology. (See under *Geology.*)
5. Petrography. (See under *Geology.*)
6. The use of heavy solutions in separating minerals for rock analysis.
7. Use of Contact and Reflecting Goniometer.
8. Drawing Crystals from Goniometric Measurements.
9. A course of lectures on Economic Mineralogy. These lectures will be illustrated by lantern-slides, and will be delivered at hours convenient for the members of the class.
10. Essays to be handed in as follows :
Oct. 31, 1905—Coal in Ontario.
Nov. 30, 1905—Salt in Ontario.
Dec. 15, 1905—Gypsum in Ontario.
Jan. 31, 1906—Gold in Ontario.

Feb. 28, 1906—Dr. T. Sterry Hunt, Sir Wm. Logan.
Mar. 30, 1906—Talc in Ontario.

Books for Reference:

The Mineral Industry.
Reports of Bureau of Mines, 1891-1904.
Transactions of Canadian Mining Institute.
American Journal of Science.
Willmott's *Mineral Wealth of Canada.*

Books for Reading:

Hugh Miller's Works.
Lyell's Principles of Geology.

The professor reserves the right to retain essays of merit for use in the library of the department

GEOLOGY.

PROFESSOR—Willet G. Miller, M.A., F.G.S.A.
ACTING-PROFESSOR—R. W. Brock, M.A., F.G.S.A.
DEMONSTRATOR—M. B. Baker, B.A., B.Sc.

Students taking work in this department have access to the Geological and Mineralogial museum of Queen's University and the School of Mining, and to the Geological library and reading room.

The petrographical laboratory is supplied with electric power, diamond saws and other apparatus required in the preparation of thin sections of rocks and minerals for examination under the microscope.

The microscope room is provided with several instruments of the latest and most approved designs.

The chemical laboratory in connection with the Geological Department is to be supplied with the necessary equipment for the chemical investigation of rocks. An additional laboratory will equipped for mechanical and physical petrographical work, and geological experiments.

A corresponding tutor has been appointed to communicate with extra-mural students.

Pass.

(Students taking Geology are advised to take Mineralogy I.)

The following themes will be treated of in the lectures: The planetary relations of the earth; the atmosphere; water; solid crust; probable nature of the earth's interior; rocks; their general megascopic and microscopic characters and classification; volcanic action; earthquakes; upheaval; subsidence; geological effects produced by heat, air, water and life; bosses; dykes; veins; stratification; dip; strike; anticline and syncline; faults; foliation; nature and uses of fossils; stratigraphical geology; outline of geological history; economic geology, etc.

The lectures are illustrated with means of maps, diagrams and lantern views.

The laboratory work will consist of the examination of typical specimens of the different groups of fossil plants and animals, and of hand specimens of the more common rocks.

During the months of October and November excursions will be made to places of geological interest in the vicinity of Kingston. All students are expected to join these excursions. The cost will not exceed five dollars.

Essays required on prescribed subjects.

Students are expected to provide themselves with some elementary book on the subject. W. B. Scott's "Introduction to Geology," (the MacMillan Co., price $1.90) is recommended.

Books for Reference:

Dana's Manual of Geology.
Le Conte's Elements of Geology (5th Ed. by H. E. Fairchild).
Chapman's Minerals and Geology of Central Canada.
Kemp's Hand-book of Rocks.

Extra-mural students are advised to read Le Conte's Elements of Geology (last edition), or Geikie's text-book of Geology (4th edition). They will also be required to write essays on prescribed subjects.

Students who are not taking Mineralogy are advised to pay particular attention to Chapter I of Scott's Geo-

logy, and to provide themselves with a collection of the principal rock-forming minerals.

HONOURS.

Preliminary.

(Students taking Preliminary Honour Geology are required to take or to have taken Crystallography.

Lectures on :

Physical Geography, Petrography and Palæontology.

The laboratory work will consist of the preparation of thin sections of minerals and rocks and their microscopic determination.

The museum work will consist of the megascopic determination of rocks and the naming and classification of Canadian fossils.

Field work. Essays are required on prescribed subjects. Candidates will also be examined on the following:

Davis', Page's or Geikie's Physical Geography.
Chapman's Minerals and Geology of Central Canada, Part IV.
Dana's Manual of Geology.
Luquer's Minerals in Rock Sections.
Kemp's Hand-book of Rocks.

Books for Reference :

Wood s Elementary Palæontology.
Harker's Petrology for Students.
Dana's Text-book of Mineralogy.
Cole's Aids in Practical Geology.

Students are advised to devote as much time as possible to field work during the preceding long vacation, and to collect material for study in the laboratory during the winter. Opportunities will be offered advanced students for engaging in field work during the summer vacation.

Final.

Lectures on :

Petrography.
Palæontology.
Geology of Canada.

Geology in its relations to Mining and Agriculture.
Construction of Geological Maps and Sections.
Laboratory, Museum and Field work.

Candidates will also be examined on the following;

Geikie's Text-book of Geology (4th Edition).
Geikie's Field Geology.
Chapman's Minerals and Geology of Central Canada, Parts IV and V.
Dawson's Hand-book of Canadian Geology.
Geikie's Founders of Geology.
Zittel's History of Geology.
Branner & Newson's Syllabus of Economic Geology.
Kemp's Ore Deposit's of the United States and Canada.

Books for Reference :

Rosenbusch's Elemente der Gesteinslehre.
Rosenbusch's Microscopical Physiography of Rock-forming Minerals.
Zirkel's *Petrographie*, Vols. I, II and III.
Harker's Petrology for Students.
Nicholson's Palæontology.
Zittel's Text-book of Palæontology. (Eastman).
Williams' Geological Biology.
Dawson's Ice Age in Canada.
Wright's Ice Age in North America.
Phillips' Ore Deposits.
Beck's Lehre von den Erzlagerstätten.

Students are advised not to undertake the work in Final Honour Geology until they have acquired a sufficient knowledge of Chemistry and Mineralogy. They should be prepared to devote a large part of their time to the subject throughout the session. Each member of the class will be encouraged to undertake research work, for which the surrounding district offers exceptional opportunities.

ART. XI—POST-GRADUATE DEGREES.

Doctor of Laws (LL.D.)

This degree is honorary, and is awarded for literary, scientific or professional distinction.

DEGREE OF DOCTOR OF PHILOSOPHY (Ph.D.) AND DOCTOR OF SCIENCE (D.Sc.)

1. Candidates for these degrees must have previously taken the degree of M.A. in the subjects they propose to offer, or must satisfy the Senate of their ability to proceed with the course.

2. Neither of these degrees can be obtained in less than three years from the date of graduation.

3. Candidates must give notice in writing to the Senate of the course they intend to take at least two years before they present themselves for examination.

4. All candidates must submit a thesis on some subject connected with their special course embodying the results of orginal investigation.

I. Degree of Ph.D.

Any two of Latin, Greek, German, Romance Languages, English, History, Moral Philosophy, Mental Philosophy, Politcal Science.

Latin.

The Ph.D. course in Latin is a continuation of the Honour work. It comprises a paper in sight translation and composition, a knowledge of Roman History and Literature from 88 B.C.—37 A.D., a linguistic, critical and exegetic knowledge of certain selected authors, and a course in *one* of the following:

Comparative Philology, Archaeology or Palaegraphy (including Epigraphy). These different branches can be taken at different times according to arrangements.

Greek.

The Ph.D. work in Greek is a continuation of the Honour course. Papers will be set on selected books and candidates will be tested on translation at sight and Greek prose composition. A knowledge of Greek history in the fifth century B.C., based on the original authorities, Herodotus, Thucydides and Xenophon's *Hellenics*, I and II, will be required. One of the following subjects is also included:

Comparative Philology.
Archaeology.
Palaeography (with Epigraphy).

German.

For the degree of Doctor of Philosophy in German there will be required:

1. A general knowledge of the history of the literature.
2. A general knowledge of the history of the language.
3. Accuracy and facility in writing and speaking German.
4. An intimate acquaintance with Gothic, Old High German and Middle High German Texts.
5. An intimate knowledge of the literary works of Lessing, Goethe and Schiller.
6. An intimate knowledge of any representative author of the 19th century since the death of Goethe.
7. A dissertation in German showing originality of treatment.
8. A minute acquaintance of the period within which the dissertation lies.

Romance Languages:

The Ph. D work is meant to be a continuation, along broader lines, of the Honour work. Besides the Thesis papers will be set testing the candidates ability to translate unseen passages and to write French Prose, as well as his knowledge of the following set subjects.

1. The History of French Literature, during any three of the following periods:

(*a*) Till the end of the 15th Century.
(*b*) The Age of Glory.
(*c*) The 18th Century taken especially in connection with the social and political conditions of the country.
(*d*) The 19th Century.

2. Certain prescribed authors.
3. The Philology of the Language.
4. Italian *or* The Comparative Philology of the Romance Languages.

For further information consult the current Calendar and write to Professor Campbell.

English Language and Literature.

Candidates offering this subject will communicate with Prof. Cappon.

History.

1. The History of England.

Continuous Constitutional History.
Continuous Political History.
A Selected Period to be studied in detail from the original authorities.

2. A period of general history to be studied in detail from original authorities.

3. The literature of the special periods selected.

The books on the constitutional history of England to be studied are:—

Stubb's Constitutional History and Select Charters.
Hallam's Constitutional History.
May's Constitutional History

Periods for detailed study.

English History.	General History.
449-1066	493-1095
1066-1272	1095-1273
1272-1485	1273-1530
1485-1603	1530-1648
1603-1714	1648-1788
1714-1880	1788-1880

Candidates are required to take the special periods most nearly corresponding with each other in English and general history, and in studying the selected periods they are expected to make themselves acquaint-

ed with their social and literary history.

Candidates are requested to put themselves in communication with Professor Ferguson, who will prescribe the authorities to be consulted.

Mental and Moral Philosophy.

1. General Course.

(A) Philosophical Systems.

Candidates are allowed the following options:

1. They may offer any *four* of the following books:—

Plato: Theætetus, Republic, Sophist.

Aristotle: Organon (Selections of Oxford Press), Metaphysics (Selections), De Anima, Nichomachean Ethics, Politics, Poetics.

Kant: Kritik der reinen Vernunft, Kritik der praktischen Vernunft, Kritik der Urtheilskraft.

Hegel: Encyklopädie, I and III, Wissenschaft der Logik, I and III, Phänomenologie des Geistes, Philosophie des Rechts, Philosophe der Religion.

Ability to translate the books offered is presumed.

2. They may offer any *two* of the above books, together with either (*a*) the works of any *one* of the following authors: Rousseau, Comte, Schopenhauer, Lotze, Hartmann, John Stuart Mill, Herbert Spencer, T. H. Green, Henry Sidgwick, or (*b*) one of the sections under B.

3. They may offer (1) any *two* of the authors mentioned above in Section 2 (*a*), or (2) one of these authors, together with *one* of the sections under B.

4. Candidates who take the examination for Ph.D. in Latin, Greek, French, German, English, History or Political Science, may offer either (1) any *two* of the books mentioned above in Section 1, or (2) the works of any *one* of the authors mentioned in Section 2 (*a*), or (3) one of the sections under B.

Acquaintance with the best recent criticism is in all cases required.

(B) Principles of Philosophy.

The following branches of Philosophy may form part of the work offered by candidates (See A., Sections 2, 3 and 4):

1. The principle of logic. References: The logical treatises of Hegel, Mill, Jevons, Venn, Lotze, Bradley and Bosanquet.

2. The Principles of Psychology. References: The psychological works of James Mill, J. S. Mill, Bain, Wundt, Sully, Ladd, James, Admanson and Lotze.

3. The Principles of Ethics. References: the ethical works of J. S. Mill, Bain, Sidgwick, Green, Bradley, Spencer, Stephen and Martineau.

4. The Principle of Aesthetics. References: The æsthetic treatises of Aristotle, Kant, Schiller, Lessing, Hegel, Lotze, Schasler, and Ruskin.

Political Science.

Candidates offering this subject will communicate with Professor Shortt.

II. Special Course for Teachers.

1. Candidates must hold (a) a certificate as School Inspector, or (b) a permanent First Class or High School Assistant's Certificate, or their equivalent.

2. They must submit certificates of successful experience as Teachers or School Inspectors.

Subjects of Examination.

A. *(a)* Any *two* of the books mentioned in A, 1, of the "General Course," or *(b)* any *one* of the authors mentioned in A, 2 *(a)*, or *(c)* any *one* of the sections under B, except Section 2, or *(d)* the examination for Ph.D. in Latin, Greek, German, Romance Languages, English, History or Political Science.

B. Psychology.
Wundt's Physiological Psychology.
James' Principles of Psychology

Ward's "Psychology" in Encyclopædia Britannica.
Stout's Manual of Psychology and Analytical Psychology.
Adamson's Lectures on Psychology (Works Vol. II.)

C. History and Science of Education.
Bosanquet's Education of the Young in the Republic of Plato.
Burnet's Aristotle on Education.
Bacon's Advancement of Learning.
Laurie's Comenius.
Rousseau's Emile.
Pestalozzi's Leonard and Gertrude (Channing).
De Garbo's Herbart and the Herbartians.
Hinsdale's Horace Mann.
Froebel's Education of Man (Hailman).
Sir J. G. Fitch's Thomas and Matthew Arnold.
Compayre's Educational Systems of Great Britain and Ireland.
J. E. Russell's The German Higher Schools.
Rosenkranz' Philosophy of Education.
Harris' Psychologic Foundations of Education.
Nünsterberg's Psychology and Life.
Dewey's School and Society.
The chief recent Educational Reports.

II. Degree of D.Sc.

1. Course for the Degree of D.Sc. in Chemistry, Mineralogy, Botany and Geology.

Candidates are required to have a thorough knowledge, practical and theoretical, of the subjects in one of the following divisions:

1. Chemistry—one of the following groups:

A. Inorganic Chemistry.
Chemistry in its relations to Mineralogy.
Inorganic Analysis and Assaying.

B. Organic Chemistry.
Chemistry in its relations to Biology.
Organic Analysis.

C. General Chemistry, including Chemical Theory in relation to Physics.

2. Mineralogy:

(1) Systematic Mineralogy.
(2) Mineralogy in its relations to Chemistry and Geology.
(3) Petrography.
(4) Ore Deposits.

(5) Determinative Mineralogy.
(6) Assaying.
(7) Economic Mineralogy of Canada.

3. Biology:

Comparative Anatomy and Physiology, Chemistry of Ferments, Bacteriology, with either of the following groups:

I. (1) Special Studies in Vegetable Histology and Physiology
(2) A practicle acquaintance with the Cryptogamic Flora of Canada.

II. (1) Animal Physiology and Embryology.
(2) Osteology and Odontography of Vertebrates.
(3) Special Study of Invertebrates (Canadian).
(4) Physiological Chemistry
A thesis containing original work done in one of these snbjects.

4. Geology:

Standing equivalent to Preliminary Honours in Chemistry and Mineralogy will be required of candidates in this department.

Either of the following groups may be chosen by a candidate as his *chief subject*, and he will be required to take the other group as a *subordinate subject:*

(1) Dynamical Geology and Petrography.
(2) Stratigraphical Geology and Palæontology.

The candidate will be expected to show an acquaintance with his subordinate subject equivalent to Honours in the undergraduate course. An intimate knowledge of the chief subject must be shown.

Detailed information to be obtained from the Professors.

FACULTY OF THEOLOGY.

(1) *General Announcement.*

The course in Theology extends over three sessions of six months each, and embraces the following subjects of study: Apologetics, two sessions, Systematic Theology, Old and New Testament Criticism and Exegesis, Church History, each three sessions, Homiletics and Pastoral Theology, each one session. Junior Hebrew and Senior Hebrew, each one session, for those who have not included them in their Arts course.

2. The student who desires to enter upon the study of Theology must be a graduate of this Univeristy or of a University whose degrees are recognized by the Senate; or he must have completed three years of a university course, as enjoined by the General Assembly.

3. Students are expected to have passed the Junior Hebrew class, and are recommended to take a full course in Arts, and to obtain a degree, before entering upon the study of Theology.

An Arts course, as here recognized, must embrace the study of Greek.

4. Students on entering Theoloy, or on intimating their purpose to study for the ministry, must be in full communion with the Church; and all such students are required, during their course, to be in communion with a congregation of the Church in Kingston.

5. At the beginning of each session each student must present a certificate to the Secretary of the Faculty from the Presbytery within whose bounds he has resided during the summer vacation; and at the close of each

session he shall, at the earliest opportunity, present his certificate to the Presbytery within whose bounds he purposes to reside.

6. Testamurs in Theology are given to students who have passed the sessional examinations on all the subjects prescribed by the General Assembly for students for the ministry.

7. Pass and B.D. examintions are held annually in April and October.

8. For further informaion see Blue Book of the Church, or apply to Rev. Dr. Ross, Secretray of the Faculty.

(2) *Matriculation.*

Matriculation examinations begin on Thursday, Oct. 26th. Candidates must give notice to the Secretary of the Faculty before Oct. 19th.

Subjects of Examination:

Examination papers will be set in the following departments:—

1. The Shorter Catechism and the contents of the Epistle to Galatians and Romans, in English.
2. Acts of the Apostles, I-XII in Greek, and Dods' Introduction, pp. 1-75.
3. HEBREW—The Article, Pronouns, Inseparable Particles, the Qal of Regular Verb, Grammatical Analysis, Ps. I, I Sam IX.
   ENGLISH—Amos I, VII, Hos I-II, Isaiah I, VI, VII, Micah I-III, Jordan's Prophetic Ideas and Ideals, pp. 108.
4. The Acts of the Apostles in the R.V., and Bartlet's Early Church History, pp. 1-66.

One paper will be set in each department.

Subjects of Study.

I.—SYSTEMATIC THEOLOGY.

PROFESSOR—Principal Gordon, M.A., D.D.

The course in this class extends over three Sessions.

The Nature of God. The Nature of Man. The Doctrine of Sin.

Text-book: Van Oosterzee's *Christian Dogmatics.* Chapters I and II.

New Testament Theology. The teaching of Paul.

Text-book: Stevens' *The Theology of the New Testament.* Part IV.

Pastoral Theology and Homilities. In addition to the treatment of this subject by Principal Gordon a special Course of lectures upon the Office and Work of the Christian Ministry will be given by the Rev. G. M. Milligan, D.D., LL.D.

II.—HEBREW.

PROFESSOR—Rev. W. G. Jordan, B.A., D.D.

FELLOW—J. A. Petrie, B.A.

Junior Hebrew.

Davidson's Hebrew Grammar, the first twenty exercises, the Verb, pp. 162-182.
Psalm I, Genesis I, I Samuel IX-XI.

Senior Hebrew.

Davidson's Grammar, exercises in paragraphs 23 to 38 inclusive. Hebrew Syntax; the class lectures. Jonah, Hagg, Mal & Zech.

III.—APOLOGETICS.

PROFESSOR—Rev. D. Ross, M.A , D.D.

The course in this class extends over two Sessions, and must be taken during either the first and second, or second and third years of the Theological curriculum.

Students who have already taken first or second class, or Preliminary Honours in Philosophy are exempted from one year's attendance.

1. Lectures on Apologetics from the beginning of the 16th century.
2. Lectures on Historical Apologetics and Comparative Religion.
3. Examination of Bruce's Apologetics, Book III.
   Butler's Analogy, Part I.

IV.—O. T. CRITICISM AND EXEGESIS.

PROFESSOR—Rev. W. G. Jordan, B.A., D.D,

Exegesis. Lectures from the Hexateuch III.
Criticism, The Hexateuch.
Honour Course:
The History of Hexateuch Criticism.
Hebrew. Micah selections from the Hexateuch.
Exercises in Davidson's Grammar, 38 to the end.
Syntax, the Hebrew tenses
Ezra, specially the portions in Aramaic.
This course extends over two years.

V.—N. T. EXEGESIS AND CRITICISM.

PROFESSOR—Rev. D. Ross, M.A., D.D.

The course in this class extends over three Sessions. Students who have taken first or second class Honours in Greek are exempted from one year's attendance. (See p. 62.)

Acts of the Apostles and Romans.
Commentaries: Expositor's Greek Testament, The International Critical Commentaries.
Kenyon's Textual Criticism.
Lectures on Introduction and Criticism.

VI.—CHURCH HISTORY AND HISTORY OF DOGMA.

PROFESSOR—John Macnaughton, M.A.

Lectures on Christian Thought and Life in the first three Centuries.

HONOUR COURSE.

Lectures on the Apostolic Fathers, edited by Lightfoot.
Lectures on Harnack's Das Wesen des Christenthums.

Classes open to Theological students who have an elementary knowledge of the German language, are conducted by Professors Macnaughton and Jordan. The text-books for 1905-6 are Harnack's Das Wesen des Christenthums, and Marti's Geschichte der Israelitischen Religion.

VII.—ENGLISH BIBLE.

LECTURERS—Principal Gordon, D.D., Professor Macnaughton, M.A.

The course in this class extends over two Sessions, and is intended to cover the whole Bible.

O. T. Part I. The Pentoteuch, early history and histories of the Divided Kingdom down to the time of the writing Prophets.
N. T. Part I. The Gospels.

The Church requires the following discourses to be delivered during the course:—Homily, Lecture and Greek Critical Exercise, Sermon and Hebrew Critical Exercise.

Pass Examination.

On the work of the session.

Degree of Bachelor of Divinity.

REGULATIONS.

1. Candidates for the Degree of Bachelor of Divinity, (B.D)., must be graduates in Arts in this University, or of a University whose degrees are recognized by the Senate, and must follow the prescribed order of classes in Theology.

2. The degree shall not be conferred until the candidate has completed the theological curriculum, with a view to the ministry in the church to which he belongs, and has passed a satisfactory examination in the branches of Theology taught in the University.

3. The divisions of the examinations shall be (1) The Holy Scriptures. Candidates will be expected to show a competent knowledge of the contents of the Old and the New Testaments, and to show special acquaintance with at least one book from the O. T. and one from the N. T. The Revised Version should be used. This division is compulsory on all candidates. Any two of the following may be taken in addition: (2) O. T. Criticism and Introduction, Hebrew and Aramaic. (3) N. T. Criticism, Exegesis and Introduction. (4) Systematic Theology. (5) Church History and History of Dogma. (6) Apologetics and Comparative Religion.

Two papers will be set in (1) and four papers in each of the other divisions.

4. Candidates who have completed the Theological course may be examined in all the subjects, or may defer their examination in any subject.

5. Students may be admitted to examination in only one division at the end of the second session of their theological course.

6. A candidate may, subject to the preceding regulations, appear at any University examinations in Theology, provided he gives two week's notice of his intenton to the Registrar and pays the examination fee.

Autumn examinations begin on Thursday, Oct. 26th. Candidates must give notice to the Secretary of the Faculty before Oct. 1st.

Subjects of Examination :

I. The Holy Scriptures. The contents of the Old and New Testaments generally with a special knowledge of Isaiah and St. Mark, in the Revised Version.

Books recommended :

Bennett's Primer of the Bible, or Kautzsch's Outlines of O. T. Literature.
Driver's Isaiah.
Menzies' The Earliest Gospel.

II. Hebrew and Aramaic. O. T. Introduction and Criticism.
(*a*) The Prophetic Literature, or the Composition of the Hexateuch.
(*b*) Theology and Exegesis. Micah, selections from the Hexateuch
(*c*) *Aramaic.* The Book of Ezra with special reference to Aramaic pssaages.

There are two papers in division (*b*) and one each in (*a*) and (*c*) Extra-mural candidates may substitute for (*c*) Gen. I-IV.

Books to be consulted :

Driver's Introduction, Bacon's Genesis of Genesis, Driver's Genesis, Davidson's Job, Cornill's History of Israel, Dillmann's Genesis, The Oxford Hexateuch, Bradley's Lectures on Job, Driver's Daniel, MacFayden's Messages of the Prophetic and Priestly Historians, H. P. Smith's O. T. History, Cheyne's Origin of the Psalter, Gunkel's Legends of Genesis.
Ryle's Ezra, Cambridge Bible, Skinner's Isaiah, II, Driver's Isaiah, Cornill's Prophet's of Israel.
Ryle's early Narratives of Genesis.
Duff's Abraham.

III. N. T. Criticism, Exegesis and Introduction.
(*a*) 1. Canonics.
Westcott, History of the Canon of the N. T.
Charteris, Canonicity.

2. Textual Criticism, MSS. Versions and principal disputed passages.
   Kenyon's Textual Criticism.
   Westcott and Hort, Greek N. T. Introduction.

(*b*) Introduction, Salmon, Weiss, Gloag, Sanday & Headlam's Com. on Rom., pp. I-XLIV; Westcott's Com. on Heb., pp. xxvii-lxxix.

(*c*) Exegesis. Epp. to Romans and Hebrews.
   Commentaries: Sanday & Headlam, Gifford, Godet, Calvin on Romans, Westcott on Hebrews.

(*d*) N. T. Greek. Burton's Syntax of the Moods and Tenses.

IV. Systematic Theology.

(*a*) The Christian Conception of God; Caird's Fundamental Ideas of Christianity, Van Oosterzee's Christian Dogmatics, pp. 234-354.

(*b*) The Christian Doctrine of Sin; Tulloch, Müller Vol. I.

(*c*) The Atonement; McLeod Campbell, Dale, Lidgett.

(*d*) The Church; Hatch's Early Organization, Hort's Ecclesia.

V. Church History and History of Dogma.

(*a*) Church History, Ante Nicene Period; Gwatkin's selections from Early Christian Writers, and Lightfoot's Apostolic Fathers.

(*b*) History of Dogma.
   The Development of Christian Thought in the first three Centuries.

Books to be consulted:

Neander's Church History, Vols. I, II; Ramsay's Church in the Roman Empire before A.D. 170, part II; Dorner's Doctrine of the Person of Christ, Vol. I; Forrest's Christ of History and Experience; Hooker's Laws of Ecclesiastical Polity, Book V, sections 50-57; Allen's Christian Institutions and Unity of Christian Thought.

VI. Apologetics and Comparative Religion.

(*a*) Philosophical and Historical.
   Fraser: Philosophy of Theism. (Gifford Lectures).
   Pfleiderer: Philosophy and Development of Religion.
   Bruce: Apologetics.

(*b*) Comparative Religion.
   Grant: The Religions of the World.
   Menzies: History of Religion.

Benefactors have placed at the disposal of the Principal a few nominations, exempting from payment of class fees throughout the course in Arts, for intending students of Theology who have matriculated. Applications for these should be made to him or to the Registrar before Oct. 1st.

The Stewart bequest of $5,000 to the Theological Department will be administered by the Faculty in terms of the will.

FACULTY OF MEDICINE.

The period of study required for the degree of Doctor of Medicine is and always has been four years. Graduates in Arts who have taken in their Arts course the subjects of Physics, Chemistry and Biology, including Physiology and Histology, may complete the Medical curriculum in three years. There are also special courses, in connection with the Arts and Science departments, in which the degrees of B.A. and M.D. or B.Sc. and M.D. may be obtained in six years.

ADMISSION OF STUDENTS.

Candidates for a degree must pass the Medical Matriculation of the University unless (1) they possess a degree in Arts, not being an honorary degree, from any recognized University; or (2) have already matriculated in Arts in any recoginzed University; (3) have passed the Matriculation examination prescribed by the Medical Council of any Province in Canada.

The Matriculation Examination must have been passed before a student will be credited with any of the professional examinations, although lectures may be attended till the beginning of the second year before passing it.

No candidate will be allowed to compete for relative standing, prizes or scholarships, till he has completed the Matriculation Examination.

The Medical Matriculation is the Junior Arts Matriculation, but the optional subjects are not required.

CURRICULUM.

Undergraduates who are candidates for the degree of M.D., C.M., must complete a period of four years

study, which must comprise three sessions of at least six months each, and one session of eight months. All students are, however, recommended to attend four full sessions of eight months each, as required by the regulations of the Ontario Medical Council and by those of many of the United States.

Regular attendance on full courses of instruction is required in the following departments.

SUBJECTS OF STUDY.

1st Year:—Physics, Animal Biology, Physiology, Histology, Anatomy, Chemistry, Practical Anatomy, Materia Medica

2nd Year:—Anatomy, Materia Medica, Practical Pharmacy, Chemistry—Theoretical, Chemistry—Analytical, Practical Anatomy, Physiology, Histology. Embryology.

3rd Year:—Practice of Medicine, Clinical Medicine, Therapeutics, Surgery, Clinical Surgery, Obstetrics, Gynæcology and Pædiatries, Jurisprudence, Pathology, Medical and Surgical Anatomy, Sanitary Science.

4th Year:—Practice of Medicine, Clinical Medicine, Surgery, Clinical Surgery, Obstetrics, and Gynæcology, Medical and Surgical Anatomy, Pathology and Bacteriology, Mental Diseases, Diseases of the Eye, Ear, Nose and Throat.

To meet the requirements of the Medical Council of Ontario and the General Medical Council of Great Britain, a fifth year course has been adopted as follows:

5th Year:—Operative Surgery on the Cadaver, Sectional Anatomy, Clinical Medicine (including Physical Diagnosis), Ophthalmology, Mental Diseases, Clinical Surgery, Diseases of Women, Diseases of Children, Practical Pathology and Bacteriology with special attention to the examination of urine, sputum, bile, stomach contents, etc.

The above course of study may have been pursued either wholly at Queen's, or partly at Queen's and partly at some other recognized medical school. In the latter case at least one full session must have been spent at this University.

Certificates of attendance on lectures are accepted from incorporated medical schools in the British Dominions and others recognized by British universities

and licensing bodies. Other certificates of attendance on lectures and examinations may be accepted at the discretion of the faculty.

Students who have passed the Senior Leaving examination in Zoology of the Education Department, will not be required to attend lectures on Animal Biology during their first Session.

All students must present certificates of having compounded medicine for a period of six months in the office of a regularly qualified medical practitioner; of having attended at least six cases of midwifery; of having reported six medical and six surgical cases; of having attended and reported on six post-mortem examinations; and of having attended hospital pratice for at least twenty-four months, before being permitted to take their final examination.

Graduates in Arts who have attended during their course letures, or taken practical instruction of the character or duration required by the curriculum in medicine, may obtain certified tickets of the course on payment of the ordinary fee demanded from students in Medicine, less the laboratory fee, paid during their Arts course.

Students in Arts or Science having the study of Medicine in view are recommended to take either of the following courses, as they may thus obtain their B.A. and M.D., or their B.Sc., and M.D. degrees in six years.

Course leading to B.A. and M.D. in six Years.

A.—1. Junior Latin.
2. Junior Greek.
3. Junior French.
4. Junior German.
} Any two.

B.—1. Junior and Senior English.
2. Junior Philosophy.
3. Junior Mathematics.

C.—1. Junior Physics and Junior Chemistry.
2. Animal Biology and Medical Botany.
3. Junior and Senior Materia Medica.
4. Junior and Senior Anatomy.
5. Senior Physiology and Histology.
6. Senior Chemistry.

D.—1. Preliminary Honour Chemistry.
2. Preliminary Honour Animal Biology.

Examination on Translation into French or German at the end of the second, third and fourth year.

The degree of B.A. is granted on the completion of the above course which is also equivalent to the completion of the second year in Medicine.

Preliminary Honour Animal Biology, D.—1, must be taken at least one session previously to attendance on Senior Physiology and Histology. C.—5; these latter being parts of the final honours.

Course leading to B.Sc. and M.D. in six years.

First Year	Math. I (8) Junior English (4) Physics I (5) Junior Chemistry (3) Drawing I (5) Surveying I (*b*) (1) Workshop I (5)
Second Year	Physics II. Senior Chemistry and Qual. Analysis. Mathematics II. Animal Biology. Pass Botany. Elementary Geology.
Third Year	Human Anatomy as for 1st Year Medical students. Preliminary Honours in Animal Biology. Quantitative Analysis (air, water, food.) Hydraulic Engineering I (to be defined). Botany of Algae and Moulds, Bacteriology. Junior Materia Medica.
Fourth Year	Human Anatomy as for 2nd Year Medical students. Final Honours in Animal Biology. Municipal Engineering. Senior Materia Medica and Pharmacy. Pathology. Sanitary Science.

The degree of B.Sc. is granted on the completion of the above course which is equivalent to the completion of the second year in medicine.

EXAMINATIONS AND GRADUATION.

Every candidate intending to appear at the Final examination must, on or before the 12th day of March (in the year in which he proposes to graduate), present to the Secretary a declaration under his own hand that he is twenty-one years of age, or that he will be so before the date of graduation, accompanied by a certificate of good moral character, and a statement of his medical studies, with proper certificates.

Every student must, on or before March 12th notify the Secretary of the examination upon which he intends to write. For this purpose blank forms are supplied.

EXAMINATIONS.

Examinations are required at the end of every session as follows:—

At the end of the first session:

Anatomy, Animal Biology and Physiology, Theoretical Chemistry, Physics*, Materia Medica.

At the end of the second session:

Anatomy, Physiology, Histology, Materia Medica, and Practical Pharmacy, Chemistry—Theoretical and Analytical*

At the end of the third session:

Practice of Medicine, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Jurisprudence, Medical and Surgical Anatomy, Sanitary Science.

At the end of the fourth session:

Practice of Medicine, Clinical Medicine, Surgery, Clinical Surgery, Obstetrics, Gynæcology, Medical and Surgical Anatomy, Pathology, Bacteriology,* Diseases of the Eye, Ear, Nose and Throat, and Mental Diseases, (Optional).

*Examinations on the subjects will be held on Dec. 16th, 1905.

On each senior paper the examiner may put pass and honour questions. Students desiring rank must answer both.

Snpplementary examinations will be held in Convocation Hall, commencing September 20th, 1905, at 10 a.m.

Students who desire to take an honour course in Arts, and who have the study of Medicine in view, are advised to take, during their Arts course, the Honour subjects in Animal Biology, and thus com-

plete part of the Practical Anatomy and all of the Physiology and Histology of their Medical course. An Arts Degree along these lines shortens by one year the course of study required by the Medical Council of Ontario.

EQUIVALENT EXAMINATIONS.

The following courses and examinations in Arts will be accepted in Medicine:—

1. Attendance on the Preliminary honour course and examination in first year Animal Biology and preliminary honours.
2. Attendance on the honour course and examination in second year Animal Biology, including Histology.
3. Course and examination in Junior Chemistry.
4. Course and examination in Senior Chemistry No. 3, and 1st honour No. 2. Arts Calendar.
5. Course and examination in 1st year honour Chemistry Nos. 1, 2 and 3.

1. Course and examination in first year Physiology and Animal Biology.
2. Course and examination in second year Physiology and Histology.
3. Course and examination in first year Chemistry.
4. Course and examination in second year Chemistry.
5. Course and examination in Senior Chemistry and in Analytical Chemistry.

FEES.

Matriculation Fee	$ 5 00
Registration Fee (for those taking partial courses) 1st year	5 00
Each year thereafter	2 00
Sessional Fee for each of the first four years	100 00

The Sessional Fee, including Classes, Registration, Athletics, Library, Examination, Laboratories, and the required amount of dissectional material is $100.00 per session. If paid before October 16th, $95.00. If not paid in full before Jan. 10th, $105.00. Special arrangements will be made with those who do not take the full course in any year.

Fifth year	$ 50 00
Supplemental Examinations (each year)	10 00
Hospital Ticket,—full course, payable with second year fees.	25 00
Hospital Ticket,—one session.	9 00
Ad eundem statum	10 00
Graduation.—M.D., C.M.	30 00
Exclusive use of Microscope per session	5 00

B.Sc. and M.D. Course.

First year	$ 55 00
Second year	55 00
Third year	60 00
Fourth year	65 00

Fifth and sixth years correspond to third and fourth years of M.D. course.

Graduation fees are payable to G. Y. Chown, B.A., Registrar of the University; all other fees to Dr. W. T. Connell, Secretary of the Faculty of Medicine.

The Calendar for the Medical Faculty can be had by applying to Dr. W. T. Connell, Secretary of the Faculty.

SCHOOL OF MINING.

Affiliated to the University.

The object of the School of Mining is to give a theoretical and practical education in applied science.

The complete course extends over four years and leads to the degree of B.Sc., but a diploma will be awarded to those who complete three years of any one of the courses and pass one the necessary examinations.

Admission.

A candidate may enter upon a course with a view to obtaining a diploma or the degree of B.Sc. upon any one of the following conditions:—

1. Having matriculated in any University in the British Empire or in the United States.

2. Having passed the Junior Leaving or Junior Matriculation Exaimnation of the Department of Education of Ontario, in English Grammar, Composition and Literature, Arithmetic, Mensuration, Algebra and Geometry, History of Great Britain and Canada, Physics and Chemistry.

3. Having been engaged for one year in engineering or surveying, or a manufacturing establishment, and having passed the Sebtember examination in (*a*) arithmetic, (*b*) algebra to quadratic equations inclusive, (*c*) the first three books of Euclid or their equivalent in any other work in Geometry, and (*d*) English composition and dictation.

While students are admitted upon matriculating in the subjects mentioned, it is strongly urged upon them to take the complete matriculation examination with the

modern language or science option. (See page 24.)

Special students may be admitted to such course of instruction as the Faculty may think proper.

The work is carried on partly in the University building and partly in the Mining School.

Courses of Study.

The following courses are offered:

1. Three years' course for a diploma. 2. Four years' courses for the degree of Bachelor of Science (B.Sc.).

GROUP I.

(A) Mining Engineering.
(B) Chemistry and Mineralogy.
(C) Mineralogy and Geology.
(D) Chemical Engineering.

GROUP II.

(E) Civil Engineering.
(F) Mechanical Engineering.
(G) Electrical Engineering.

GROUP III.

(H) Biology and Public Health.

For further information see Calendar of the School of Mining, which will be forwarded on application to the Secretary, G. Y. Chown, Kingston, Ont.

EQUIPMENT.

The John Carruthers Science Hall was built in 1890 for the department of Chemistry. Part of the space is at present occupied by the departments of Mineralogy and Geology, for which a new building is in course of construction.

The practical work in chemistry is carried on in three laboratories: No. 1 for qualitative analysis, No. 2 for quantitative analysis, and No. 3 for experimentation in class, and drill on the subjects treated of in the junior

lectures. No. 1 and 2 are fitted up with 62 and 42 locked work places, so that 104 students can be provided each with a set of apparatus under lock and key. No. 3 serves both as a laboratory and a class room. It is furnished with seats and desks which are at the same time work tables. Besides these larger laboratories there are smaller rooms devoted to special branches of analytical chemistry and to research.

The blowpipe laboratory is arranged to accommodate forty-eight students, working twenty-four at one time.

The assaying laboratory is furnished with the plant neccessary for conducting assays of gold, silver, copper, iron, nickel, zinc and lead ores, by furnace, titration and electrolytic methods. With the various furnaces students are taught the use of hard coal, soft coal, coke, gasoline and illuminating gas as fuel. The laboratory is well supplied with ore-bins and samples of pulverized ore from the mining laboratory, so that practice may be had with a variety of ores. The mineral cabinets contain typical examples of the commonly occurring ores of the various metals treated in the course; these are used for illustrating the lectures which supplement the text-books used.

The mineralogical and crystallographic collections have been carefully made and arranged with a view to their use in teaching the subjects in a practical way. A special feature is the large number of sets of the commoner minerals for the daily use of the students, each of whom keeps his own set throughout the session.

The *petrographical laboratory* is supplied with electrical power and provided with diamond saws and other apparatus needed in the preparation of thin sections of minerals and rocks for examination with the microscope.

There are provided for the use of the students seven petrographical microscopes of the latest and most improved designs.

Laboratory facilities are also provided for microscopical tests, and for the use of heavy solutions in separating the constituents of the rocks.

The Engineering Department.

The work in engineering is practical as well as theoretical. The new Engineering building contains two laboratories for experimental work in hermodynamics and Mechanical Engineering, three laboratories for experimental work, in Electrical Engineering, and a laboratory for testing the strength of materials. In addition to these there is a large draughting room, a research laboratory and a room for surveying instruments.

The college buildings are lighted and heated from a central power plant which is connected with the Engineering building. This plant affords exceptional facilities for practical instruction.

The Mechanical Laboratory.

The mechanical laboratory consists of two departments, wood-working and metal-working. The wood-working shop is 72 x 32 feet and is well lighted on both sides. The appliances are a jig saw, a circular saw, and three wood-turning lathes, two with four feet beds and the third with a six foot bed; benches 6 feet and 12 feet long, with accomodation for two persons at each bench, and all the necessary small tools. Students are given rough sketches with dimensions of the work in which they are to engage. They are then required to make working drawings to scale, with all details, and

to work from their drawings. Accurate drawings and careful work is insisted upon.

The work for each student begins with dressing wood to size and putting together by various joints. After some skill has been acquired the student is set to making boxes, drawers, simple useful objects, and various kinds of models. In the second term turning is taken up and students are encouraged to make useful articles for themselves, such as small boxes, small table bookcases, mineral cabinets, stands, &c., the cost for each being merely that of the material put into them.

The metal-working departments contains one large room 64 by 16 feet, and two smaller rooms each 32 by 16 feet, besides a private room for the directors. In the large room are three lathes, two drill presses—one large and one small—a shaping machine and a gear-cutting engine for iron wheels, supplied with Brown and Sharp milling cutters. One of the small rooms contain the grindstone, the emery grinders, and a gear-cutting machine with fly cutters for brass and wooden wheels. Both gear cutters are capable of cutting any number whatever of teeth with pitches from 12 to as high as you please, and will take in blanks up to 7 in. diameter. The second small room is used mostly as a model room in whicrh such models as are thought worth preserving are stored. This room contains also a large clock with Dennison's gravity escapement, upon the model of a turret clock, and various working models which are put in motion by moving a switch. The clock supplies time to the building. And it and all the models were wholly constructed in the shops.

In the directors' room are a small lathe with slide rest, and a boring machine for drilling the blanks of

lantern pinions, and other things of like kind. Two new lathes, a plane with a compound slide rest and a rack feed, and a pittler lathe are in operation.

Ten lessons in blacksmithing are taken by each student during the latter part of his term.

The shops are airy and well warmed and lighted, and neatness cleanliness and order are insisted upon, so that the shops become an attractive feature of the student's course.

THE MINING LABORATORY AND ORE TESTING WORKS.

The School of Mining has developed from small beginnings a large and comprehensive laboratory, with first-class modern equipment for the practical milling and dressing of all kinds of ores. With but few exceptions the appliances are of standard sizes, such as are employed in actual practice in large works, so that students may obtain efficient instruction in the adjustment, operation and care of this kind of machinery. An elaborate training is also given in the methods of testing ores for process, in which respect the School of Mining offers peculiar advantages, since many mine owners throughout the Dominion avail themselves of the facilities oft his laboratory for working out problems in ore milling and dressing on such a scale as to furnish reliable *data* for the specification of projected plants.

Thus large quantities of largely different classes of ores are being tested throughout each session, affording students valuable experience of the most valuable sort.

A systematic course of study is carried out, involving comparative investigations into the effects produced upon different ores by varying methods of crushing; hydrauilc classification, jigging, buddling, vanning, riffle-washing, etc., etc.

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Membership... }
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Hand-Book ... A. K. Connolly

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"	'07	J. A. Shaver A. Letherland
"	'08	H. Clarke J. Williams

PART II.

PART II.

MEDALS, PRIZES, AND SCHOLARSHIPS FOR 1904-5.

UNIVERSITY MEDALS.

Latin	Brydon, R., Ottawa.
Greek	Munro, P. F., M.A., Aylmer.
German	Dadson, Helena, B.A., Union.
French	Black, N. F., M.A., Springfield.
English	Gordon, Wilhelmina, M.A., Kingston.
History	May, H., B.A., Little Current.
Moral Philosophy	Chambers, L.P., M.A., Bardezag. Turkey.
Mental Philosophy	McDougall, L. M., M.A., Brockville.
Chemistry	Speers, J. A., B.A., Alliston.
Political Science	Swanson, W. W., M.A., Oshawa.
Mathematics	Malcolm, L., M.A., Stratford.
Animal Biology	Knapp, E., M.A., Battersea.
Medicine	Spooner, A.C., B.A., Latimer.
Surgery	Lesses, M., Kingston.
Mineralogy	Guy, R. D., M.A., Camden.

UNIVERSITY PRIZES—ARTS.

Latin Prose Composition	Munro, P. F. ,M.A., Aylmer.
Greek Prose Composition	McLean, R. A., B.A., Smith's Falls.
The Sir John A. Macdonald Prize Political Science, given by Hon. Senator Gowan, C.M.G.	Beckett, S. E., M.A., Kintail.
Roughton Prize in German	Eby, O. S., Philipsburg.
Professor's Prize in Frnceh	Bland, G. H., Pembroke.
Rogers Prize in English	Omond, N. M., London.
Lewis	McConachie, J. C., B.A., Demorestville.
McLennan Prize in Hebrew	Ferguson, Wm., McLaren's Depot.
Gowan Foundation in Botany	Little, T., Kingston.

UNIVERSITY PRIZES—MEDICINE.

Dr. Clarke's Prize in Mental Diseases	Macgillivray, T. D., Kingston. Sproule, E. W., Harrowsmith.
Dr. Mundell's Prize in Medical and Surgical Anatomy	Kingston.
McCabe Prize in Pathology	Baker, A. E., Oznabruck Centre.

Faculty Prize, (Second Year)....Trousdale, F. H., Hartington.
New York Alumnae Association Prize in Physiology and Histology.....Quigley, J. P., M.A., Kingston.
Hayunga Prize in Pharmacology and Therapeutics.....Burke, M.L., Port Antonia, Jamaica.
Hayunga prize for Best Dissection made by two students.....Spankie, A. T., Wolfe Island, Walker, M. J. O., Kingston.
Wm. K. Warner & Co. Prize for Best Examination in Anatomy of first year.....Nurse, C. T. C., Georgetown, B.G.

UNIVERSITY SCHOLARSHIPS.

I.—Arts.

MATRICULATION.

Junior.

Nicholls Foundation, No. 2.... Macdonnell, H., Kingston.
Kingston.....Davidson, Edith, Kingston.
Nicholls Foundation, No. 3.....Steele, R. W., Orangeville.
McLennan Glengarry Foundation.McDonnell, A., Williamstown.
Frontenac.....Henry, S. H., Sydenham.
Forbes McHardy.....McMillan, J. D., Alexandria.

Senior.

Prince of Wales.....Campbell, W. B., Brockville.
Governor-General.....McQueston, Margarette E., Hamilton
Chancellor.....Calhoun, Kathleen, Ottawa.
Mackerras Memorial.....Graham, C. R., Arnprior.
Williamson, No. 1.....Alford, Ethel L.
Williamson, No. 2.....Foster, Beatrice L., Smith's Falls.
Leitch Memorial, No. 1.....Cornell, M. L., Carleton Place.
Nicholls Foundation, No. 1.....Miller, Edna A., Brockville.
Mayor.....MacArthur, Annie M., Kingston.
Forbes McHardy.....Stewart, Annie J., Renfrew.
Watkins.....Livingston, C. W., Kingston.
Mowat.....Wallace, W. G., Kemptville.

II.—ARTS AND PRACTICAL SCIENCE SCHOLARSHIPS.

Chancellor's.....McColl, C. R., Chatham.
Graduate in Chemistry.....Wallace, W. G., Metcalfe.
Calvin in Latin.....Foster, B. Louise, Smith's Falls.
McLennan in Greek.....McDonald, R. J. Golspie.

III.—MEDICINE.

Chancellor's.....Sparks, J. F., B.A., Kingston.
Dean Fowler.....Bolton, Elmer, Phillippsville.
Hospital.....Spooner, A. C., B.A., Latimer. Lesses, M., Kingston. Williamson, H. J., B.A., Kingston.

IV.—THEOLOGY.

A. MATRICULATION.

David Strathern Dow.....Brown, G. A., Oak Grove.
Dominion.....Watt, W. J., Walkerton.
Buchan, No. 1.....Black, B. S., B.A., Kingston.
Buchan, No. 2.....Kennedy, W. A., Stratford.
Buchan, No. 3.....Marshall, D. H., Camden.

B. SESSIONAL.

Sarah McClelland Waddell.....Brown, G. A., B.A., Oak Grove.
Chancellor's.....Kidd, C. E., B.A., Prospect.
Spence.....Black, B.S., B.A., Kingston.
Anderson, No. 1.....Beveridge, R. W., B.A., Port Elmsley.
Anderson, No. 2.....Lindsay, M. A., London, Eng.
The Tawse.....Macdonnell, Logie, M.A., Hamilton.
Toronto.....Stevenson, R. M., Ridgetown.
St. Andrew's Church, Toronto.....Wallace, H. T., B.A., Hamilton.
Rankine.....Hutcheson, J. H., Brechin.
Glass Memorial.....McInnis, W. H., B.A., Vankleek Hill.
James Anderson Bursary.....McKinnon, J. D., East Lake, Ainslee, C. B.
William Morris Bursary.....Beckett, S. E., M.A., Kintail.

LIST OF GRADUATES FOR 1904, 1905

MASTERS OF ARTS (M.A.).

Asselstine, E. B., B.A.....Wilton.
Asselstine, Elizabeth C., B.A.....Asselstine.
Beckett, S. E. J., B.A.....Kintail.
Black, N. F.....Springfield.
Boland, W. A.....Killaloe Station.
Bothwell, A. M.....Perth.
Cameron, D. R.....Lancaster.
Chambers, L. P.....Woodstock.
Connor, Grace Louise.....Kingston.
Elder, Hosie.....Elder's Mills.
Gordon, Wilhelmina.....Kingston.
Guy, R. D.....Camden East.
Hawes, Ida E.....Pasadena, Cal.
Knapp, E.....Battersea.
Malcolm, L.....Stratford.
Morden, G. W. A.....George School, Pa.
Munro, P. F., B.A.....Aylmer.
Macdonnell, J. M.....Kingston.
McDougall, L. M.....Brockville.
Polson, S. M.....Kingston.

Saunders, Elsie E. ..... Kingston.
Swanson, W. W. ..... Oshawa.
Wormwith, N. B. ..... Kingston.

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BACHELORS OF ARTS (B.A.).

Anglin S ..... Battersea.
Anning, N. H. ..... Oxmead.
Bell, F. C. ..... Winnipeg.
Beveridge, R. W. ..... Port Elmsley.
Bright, A. ..... Montreal.
Bryson, Isabel S ..... Kingsmere, Que.
Cathro, Elizabeth D. ..... Lindsay.
Clarke, H. J. ..... Belleville.
Couch, S. ..... Melita, Man.
Curtin, C. J. ..... Brockville.
Dadson, Helena ..... Union.
Down, G. W. ..... Erin.
Dunlop, H. ..... Kingston.
Fairlie, J. ..... Kingston.
Finn, J. P. ..... Plantagenet.
Fleming, W. S. ..... Franktown.
Foik, H. J. ..... Kingston.
Gillies, D. A. ..... Carleton Place.
Graham, C. W. ..... Kingston.
Grove, W. G. ..... Ringwood.
Hadden, A. T. ..... Toronto.
Hay, W. M. ..... Kingston.
Hiscock, Reta W. ..... Kingston.
Jones, F. A. ..... Ottawa.
Kennedy, W. A. ..... Stratford.
Kidd, A. J. ..... Prospect.
Knight, W. ..... Belleville.
Leitch, G. C. ..... Dutton.
Lindsay, Muriel C. ..... Portsmouth.
May, H. P. ..... Little Current.
Michell, Kathleen M. ..... Perth.
Montgomery, W. H. ..... De Grasse, N.Y.
Munro, Maggie B. ..... Iroquois.
McCutcheon, J. M. ..... St. Thomas.
Macdonald, J. ..... Deseronto.
Macgillivray, Florence ..... Kingston.
Macgregor, Annie K. ..... Almonte.
Macgregor, Grace C. ..... Almonte.
McGregor, D. A. ..... Tiverton.
McKay, J. M. ..... Kintore.
McLeod, K. C. ..... Golspie.
McLeod, N. ..... Dunvegan.
Ostrom, Ethel L. ..... Alexandria.
Parsons, J. E. ..... Toronto.

Pearce, W. R. ..... Wallacetown.
Pringle, J. F. ..... Cornwall.
Reid, Lulu ..... Kingston.
Scott, Jean M. C. ..... Kingston.
Scott, R. A. ..... Walkerton.
Sharpe, Helena A. ..... Odessa.
Singleton, Jessie W. ..... Kingston.
Speers, J. A. ..... Alliston.
Stevenson, R. M ..... Ridgetown.
Uglow, W. L. ..... Kingston.
Watt, W. J. ..... Walkerton.
Williamson, Florence, G. ..... Kingston.
Wood, H. S. ..... Peterborough.

GRADUATES IN MEDICINE (M.D.) AND MASTERS OF SURGERY (C.M.).

Bennett, H. J. ..... Gananoque.
Chant, Joseph ..... Chantry.
Code, J. H. ..... Kingston.
Consitt, E. C ..... Perth.
Corrigan, J. A. ..... Kingston.
Dudley, W. H. ..... Pembroke.
Dwyer, J. G., M.A. ..... Kingston.
Ferguson, J. Y., B.A. ..... Renfrew.
Gaudet, E. A., B.A. ..... Moncton, N.B.
Girvin, A. W ..... Stella.
Grimshaw, M. E. ..... Wolfe Island.
Halladay, R. W., B.A. ..... Elgin.
Hogan, J. T. ..... Perth.
Hourigan, J. M. ..... Smith's Falls.
Hunt, A. H. ..... Bridgetown, Barbadoes.
Lesses, M. ..... Kingston.
Locke, M. ..... Brinston's Corners.
Macgillivray, T. D., B.A. ..... Kingston.
MacKinnon, D. L. ..... Lake Ainslee, N.S.
MacMillan, A. D ..... Finch.
Mahood, A. E., B.A. ..... Kingston.
McIntosh, P. A., B.A. ..... Dundela.
Moxley, C. R. ..... Kingston.
Randall, G. R. ..... Seeley's Bay.
Reynolds, M. E., B.A. ..... Athens.
Reid, R. G. ..... Kingston.
Robb, J. J., B.A. ..... Battersea.
Robb, W. M. ..... Lunenburg.
Smith, B. A. ..... Hartington.
Smith, W. A. ..... Kingston.
Sparks, J. F., B.A. ..... Kingston.
Spooner, A. C., B.A. ..... Latimer.
Sproule, E. W. ..... Harrowsmith.
Tennent, K. W. ..... Belleville.

Turnbull, John ..... Lowville.
Wagar, C. M. ..... Enterprise.
Warren, F. R. W., B.A. ..... Balderson.
Warren, J. W. ..... Harper.
Williamson, H. J., B.A. ..... Kingston.

BACHELORS OF SCIENCE (B SC

In Mining Engineering.

Bateman, G. C. ..... Kingston.
Cairns, D. D. ..... Columbia, B.C.
Cartwright, C. T. ..... Kingston.
Collins, E. A. ..... Copper Cliff.
Sloan, D. ..... Perth.
Strachan, B. O. ..... Kingston.
Wright, A ..... Brockville.

In Civil Engineering.

Cumming, A. L. ..... Cornwall.
Fairlie, T. U ..... Kingston.
Grant, J. R. ..... Chesley.
Johnston, W. A., M.A. ..... Athens.
Macphail, J. G. ..... Orwell, P.E.I.
Sears, J. ..... Kingston.

In Electrical Engineering.

Baker, C. W. ..... Kingston.
Gage, R. G. ..... Riverside, Cal.
Henderson, E. W. ..... Almonte.
Montgomery, O. M ..... Lanark.
Macilquham, W. L. ..... Lanark.
Scott, H. H. ..... Perth.

In Electrical-Mechanical Engineering.

Way, W. C. ..... Lindsay.

MINING ENGINEERING (M.E.)

Corkill, E. T. ..... Sydenham.

BACHELORS OF DIVINITY (B.D.)

Cowan, Hugh, B.A ..... Shakespeare.
McConachie, J. C. ..... Demorestville.
MacInnes, W. H., B.A. ..... Vankleek Hill.
Solandt, D. M., B.A. ..... Kingston.
Whiting, C. C., M.A ..... Toledo.

TESTAMURS IN THEOLOGY.

Miller, J. H., B.A. ..... Avening.
Macdonnell, L., M.A. ..... Toronto.
McQuarrie, W. J., B.A. ..... West Bay, C.B.
Strachan, C. C., B.A. ..... Glencoe, Ont.

DOCTORS OF LAW.

Bray, D. L., M.D ..... Chatham.
McBean, D.D..... Montreal, Que.

DOCTORS OF DIVINITY.

Battisby, Rev. James ..... Chatham.
Crummy, Rev. Eber..... Kingston.
Fleck, Rev. James ..... Montreal, P. Q.

PASS LISTS.

ARTS.

I. SUPPLEMENTAL EXAMINATIONS, SEPTEMBER, 1904.

Junior Latin—Struthers, W. E.; Van Dusen, E.; Coombes, J. E.; Bryson, G.; Simmons, G. E.; McKim, C. W.; Weir, W.; Kerr, M.; Clifford, Margaret; Ward, H.; Evans, J. J.

Senior Latin—Tomkins, E. A.; Hanohoe, Angus.

Junior Greek—McMullan, G.; Nichol, C. O.; Salisbury, C. C.; Aiken, J. A.

Senior Greek—Gilmour, A.; McKee, W. W.

Junior French—Tomkins, E. A.; Van Dusen, E.; Houston, J. A.; Byers, J. C ; Mabee, H. C.; Weaver, Ora; Goodfellow, T. G.

Senior French—McKonkey, Eva; Robinson, Mabel; McEachran, Mary; Finlayson, D. K.

Junior German—Knight W.; Spotswood, Edna.

Senior German—Cowan, Edith; Ockley, Beatrice; Robinson, Mabel.

Junior English—Rhoades, H. G.; Laing, A.; Macdonald, A.; Weaver, Ora; Oswold, W. A.; Robinson, J. C.; Nesbitt, Mabel E.

Senior English—Clarke, H. J.; Hamilton, W. J.; McEachran, Mary; Clarke, T. E.; Fuller, E. C.; Kerr, Martin; McKim, C. W.

Mediaeval History—Amoss, Harold, E.; McEachran, Mary; McEachren, E. G.; Clancy, Gordon; Bluett, Claude; Hughes, Ada; Anglin, Jennie; Hiscock, May.

English Constitutional History—Amoss, Harold; Finn, J. P.; Hawes, Ida; Shaver, Alice.

Pass Mental Philosophy—Knight, W.; MacKinnon, Geo. W.; Rhoades, H. G.; Donevan, F. J.; Everts, H. A.; Simmons, G. E.; Laing, Andrew; Finlayson, D. K.; Paterson, R. K.; Finn, J. P.; Brown, H. W.; Ellis, R. T.; Trask, J. A.; Cooper, A. B.; Sine, F. L.; Cowan, M. Edith.

Economics—Stevenson, R. McK.; Cowan, Mary E.

Politics—Couch, S.; Finlayson, D. K.; Moffat, W. J.; Sargent, F. R.

Junior Mathematics—Hughes, Ada; Ellis, R. J.; Bryson, Isabel; Finlayson, D. K.; Donovan, F. J.; Millar, J. H.

Senior Mathematics—Flynn, A.; Coombes, G. E.; Tett, B.

Junior Physics—Kingston, H. R.; MacDonald, A.

Senior Physics—Sine, F. L., Wyatt, E.; MacGill, A. B.

Pass Animal Biology—MacEachren, E. G. D.; Connolly, H. A.; Odell, Lena; Graham, Violet B.; McMillan, Geo.; Aiken, J. A.

Pass Botany—Clarke, Thomas E.; Connolly, H. A.; Knight, W.; Forrester, J. W.; Paterson, R. K.; Cameron, John S.

Junior Chemistry—Clifford, Margaret; Forrester, J. W.; Ellis, R. J.; Claxton, W. A.; Reid, Lulu; Fleming, A. A.

Senior Chemistry—Cornett, W. F.; McEwen, D. F.

Elementary Mineralogy and Blowpipe Analysis—Speers, J. A.

2. SESSIONAL EXAMINATIONS.

Junior Latin—Div. I, Muir, Jessie; Somerville, R. A.; English, R. G.; Caverley, C.; Fraser, D. J.; Paul, C. A.; Walker, A. J.; Webb, J. R.; Lane, D. J.; McDonell, A. D.; Liggett, R. H.; Little, A.; Young, J. H. Div. II—Clancy, G. S.; McEachern, J. G.; Heywood, Caroline; Haughton, C.; McAskill, J.; Malloch, T. A.; Cathro, Eliz.; Gordon, J. B.; Kirkpatrick, W. H.; Dingwall, W. A.; Stewart, Lily B.; Anglin, R. W.; Davidson, E.; Foik, H. J.; Rowe, Rebecca. Div. III—Joyce, C. E.; Weaver, Maud; McKiel, H.; Black, N. F.; Ap'John, F. J.; Barker, J.; Brown, D.; Carruthers, W. T.; Gilchrist, W. A.; Smith, F. C.; Miller, Emma M.; Dwyer, W. O.; Fargey, A. Mabel; Chapman, W. F.; Lipman, A.; Daley, James; Maloney, T. L.; Snyder, H. A.; Spankie, H. L.; Thompson, B. W.; Carson, F.; Galloway, J. E. B.; Compton, Edith; McCammon, J. G.; Cameron, D. R.; Hunter, G. H.; Hamilton, J. R.; Robinson, Mabel G.; Hughes, Ada E.; Lambert, Beatrice; McEachern, Mary; Daley, T. V.; Foley, P. E.; Gravelle, T. W.; Rolls, J. C.; Smith, Harriet I.; Starr, Hannah J.

Senior Latin—Div. I, Foster, B. Louise; Graham, C. R.; Russell, Ella; Tracey, W. R.; Elliott, Emily M., Wilson, A., equal; Eby, O. S., English, R. G., equal; Cowles, J. P.; McDonald, R. J.; Lynd, L. E., Matthews, Jessie, equal; Livingston, C. W.; Calhoun, Kathleen; McLeod, N.; Macfarlane, Mary; Cornett, A. D.; Burns, C. J.; Nicol, Margaret A.; Macgillivray, J. M., McArthur, D. A., equal; Charlesworth, J. W.; Shaver, C. A.; McIntosh, W. D.; Mattock, E. Maude, Reid, Jean S., equal; Ferguson, J. D. Div. II—Macarthur, Annie; Millar, Edna; Mills, Frances; Clifford, Margaret, Simmonds, G. E., equal; McMichael, Mary; Beecroft, W. A.; Easson, C. Roy; Bertram, Jean K., Van Dusen, E. M., Clugston, J. F., equal; Stott, W.; Mackay, Minnie; McCallum, J. F. Div. III—Foik, H. J., Hiscock, May B., equal; Drys-

dale, F. W., Poole, M. Edna, equal; Macfarlane, Annie S.; Hallett, W. J.; Rintoul, A.; Anglin, S. M.; Donald, Jean; Bigelow, G. H., Ockley, Beatrice, equal.

Junior Greek—Div. I, English, R. G.; Jewitt, T. J.; Omond, M. N.; Lane, D. J.; Legett, R.; Haughton, C.; Gilchrist, W. A. Div. II—Young, J. H.; Anglin, R. W.; McPherson, P.; McAskile, J.; Laing, A.; Little, Andrew; Clarke, H. M. Div. III—Stott, W.; Young, J. H.; Amoss, H. E.; McCutcheon, J.; Seymour, A.

Senior Greek—Div. I, McDonald, R. J.; Lynd, L. E.; Graham, C. R.; Burns, C. J.; Cornett A. D. Div. II—Matheson, M.; Ferguson, J. D.; Parsons, J. E.; McLean, Marion; McIntosh, W. D.; Wallace, S. A.; Beecroft, W. A.; Rintoul, A.; Hay, W. M.; Matthews, Jessie E.; McCracken, H. R. Div. III—Shaver, Charles A.; McCutcheon, J. M.

Junior German—Div. I, Ferguson, Eleanor; Omond, M. N.; Davidson, Edythe; Malloch, T. A. Div. II—Goodwin, W. M.; McFarlane, D.; Huff, J. S. Div. III—Hannah, E.; Milliken, J. B.; Snyder, H. A.; Fargey, Agnes M.; Tuck, J. R.; Branion, S. J. A.

Senior German—Div. I, Eby, O. S.; Wilson, A.; McDunnough, J.; Elliott, Emily M.; McArthur, Annie; Foster, Louise. Div. II—Calhoun, Kathleen; Miller, Edna; Alford, Ethel; Scott, Carrie, Russell, Ella, equal; Clifford, Margaret, Feasby, W. J., equal; Mills, Frances W.; Macdonnell, Eleanor; McFarlane, Mary B., Knight, W., equal. Div. III—McKenzie, Winewood; Hallett, W. J., MacFarlane, Annie O., equal; McConkey, Eva, Spotswood, Edna, MacKay, Minnie, McMichael, Mary W., McCormack, Irene, and McEachern, Mary, equal; McKenzie, Jessie J.; Munro, Jean; Reid, Jean.

Junior French—Div. I, Heywood, Caroline; Ashman, G. H., Davidson, Edythe McL., equal; Malloch, T. A.; Carmichael, D. A.; Lowe, Maysie; Goodwin, W. M.; Chatterton, Anna, Macdonell, A. D., equal; Compton, Edith; Weir, W. J., Wilson, G. H. equal. Div. II—Gordon, J. B.; Jones, F. A.; Richardson, Elizabeth A.; Rowe, Rebecca, Foley, D. E., equal; Germain, H. A.; Weaver, Maud, McKiel, H. W., equal; Clarke, H. J., Lavell, Marion F., McEachran, J. G., equal; Smart, R. S.; Cadenhead, A. F. G.; Lipman, A.; Maloney, T. L. Div. III—Greene, Edythe M., McCammon, J. G., equal; Clancy, G. S., Daley, J., Lambert, N. Beatrice, equal; Jackson, G. W.; Moffatt, W. J., Spankie, H. L., equal; Starr, Hannah J., Fargey, Agnes M., Forrester, J. W., equal; Craig, V., Simpson, J. M., equal; Laidlaw, R. J.; Code, S. W. A.; Carson, F., Dwyer, W. O., Gardiner, J. N.,

Haycock, Margaret, Hunter, E. H., Lake, Ethel M., Powell, Isabelle, Raymond, A. L., Walsh, M. J., equal; Bennett, W. P.

Scientific French, Second Year—Div. I, Voaden, A. Div. II—Wallace, W. J.; Robb, D. Div. III—Dunham, C. S.; Letherland, A.; Goodfellow, T. J.; Reynolds, B. C.; Ellis, R. J. *Third Year*—Cornett, W. F.; Hughes, R. A.; Voaden, A.; Claxton, W. A. *Fourth Year*—McLennan, D.

Senior French—Div. I, Bland, C. H.; McDunnough, J.; Eby, O. S.; Wilson, A.; Foster, Beatrice L.; Calhoun, Kathleen; Alford, Ethel F.; Miller, Edna A., Reid, Jean G., equal. Div. II—MacFarlane, Mary B., MacKenzie, Winewood F., equal; Everts, H. A.; Crawford, Pearl E.; McLeod, N.; Smith, G. H.; Reid, Lulu, Fokes, A. F., equal; Muir, Jessie; Clifford, Margaret, Knight, W., equal; Bertram, Jean K., Karr, W. J., equal; MacFarlane, Annie S.; McArthur, Annie; MacKenzie, Jessie J. Div. III—Fuller, E. L.; Downey, R. F., Hamilton, W. J., Spotswood, Edna, equal; Burns, Olive; Mackay, Minnie; Hiscock, May, Mills, Frances W., Scott, Carrie L., equal; MacMichael, Mary W.; Livingston, C. W.; Donald, Jean, Chandler, Pearl, equal; Hallett, W. J.

Junior English—Div. I, Stidwell, F.; Foley, Dr. D. E.; Wilson, G. H.; Ferguson, Eleanor. Div. II—Chatterton, Anna; Clancy, G. S.; Thompson, B. W.; Weir, W. J.; McCammon, J. G.; Somerville, R. H.; Houghton, C.; McEachern, J. G.; Dewey, W. G.; Lane, D. J.; English, Ralph· Cooper, C. H.; Lowe, Maysie; Rowe, Rebecca; McKechnie, Phoebe; Gilchrist, W. A.; De Forneri, Kate; Jackson, George W.; Graham, C. R.; Smart, R. S.; Snyder, H. A.; Davidson, Edythe; Orford, Colin. Div. III—Hunter, G. H. V.; McEachern, J. J.; Daley, T. V.; Dingwell, W. A.; Leggett, R. H.; Heywood, Caroline; Easson, Roy; McDonnell, A. D.; Maguire, J. D.; Brown, C. D.; Craig, Vernon; Watson, A. R.; Richardson, Elizabeth; Little, A. M.; McKay, Bert.; Campbell, W. G.; Wood, A. V.; McKiel, H.; Fargey, Agnes M.; McArthur, Donelda A.; Young, J. H.; Campbell, W. M.; Houston, J. H.; Rolls, J. C.; Webb, J. R.; Oldham, M. E.; Lake, Ethel M.; Macdonnell, Eleanor; Ross, G. E.; Daley, J. C.; Kirkpatrick, W. H.; McRae, A. R.; Compton, Edith; Jeffrey, O. W.; Simpson, J. M.; Powell, Essie; Spankie, H. L.; Clarke, Harold; Gordon, J. B.; Malloch, T. A.; Houston, J. A.; Toffey, F. H.

Senior English—Div. I, Omond, N. M.; Clifford, Margaret; McInnis, Isabelle; MacFarlane, Annie; Simmons, George E. Div. II—Macfarlane, Mary B.; Knight, W.; Fokes, A. F.;

Ferguson, J. D.; Brown, D.; Stott, W.; Donald, Jean; Bland, C. H.; Shaver, J. A.; Foster, Louise; Everts, H. A.; Parsons, J. E.; Rintoul, A.; Wilson, A.; Stewart, Lily D.; Hanna, E. B.; Huff, J. S.; Atwater, H. E.; Calhoun, Kathleen; Spotswood, Edna; Dwyer, W. O.; Livingston, C. W.; Drysdale, F. W.; Dunham, C. S. Div. III—Macpherson, P. G.; Pringle, G. W.; McIntosh, W. D.; McCallum, J. F.; McArthur, Annie; Goodfellow, T. J.; Robb, D.; Miller, Emma M.; Carmichael, D. N.; Cowles, J. P.; Voaden, A.; Macgillivray, J. M.; Bowen, N. L.; Burns, C. J.; Crawford, Pearl; Eby, Oscar; Matheson, M.; Wallace, W. G.; Fockler, C. E.; MacKenzie, Jessie; McKay, Minnie B.; Smith, G. H.; Stillwell, G. B.; Reid, Jean G.; Cornett, A. D.; Mills, Frances; Alford, Ethel F.; Cornell, M. L.; Rhoades, H. G.; Beecroft, W. A.; Burchell, A. M.; Rafter, Rixon; McAskill, J.; Forrester, J. W.; Donovan, F. J.; Ashman, G. H.; Tuck, J. R.; Douglas, J. H.; Ferguson, J. J.; Maxwell, Daisy; Froats, James; Workman, H. C.; Millar, Edna; Laing, A.; Letherland, A.; MacKenzie, Winewood; Jordan, D.; Hiscock, May; McInnes, G. L.; Shaver, J. M.; Urquahart, R.; Fraser, D. J.; Robinson, J. C.; Munro, Jean; Hughes, R. A.

Mediaeval History—Div. I, Clifford, Margaret; Fuller, E. L.; Reid, Lulu, Drysdale, F. W., equal. Div. II—Ockley, Beatrice; McDonald, J.; Reynolds, Lillian; Crawford, Pearl, McArthur, Annie, equal; Ferguson, J. D.; White, H. P. Div. III—Scott, Bessie M., Donald, Jean, equal; Scott, Carrie; Atwater, H. E.; Dingwall, Wm. A.; Cowles, J. P., McArthur, D. A., equal; Stewart, Lily, McArthur, Donalda, Heywood, Caroline, equal; Fokes, A., Hanna, E., equal; Wallace, S. A., Williams, Mary I., equal; Mulloy, Lulu; Bertram, Jean, Reid, Jean, Rintoul, A., Montgomery, W. H., equal; Anglin, S. M.; Spotswood, Edna, Haycock, Margaret, Maxwell, Daisy, equal.

Constitutional History—Div. I, Baird, A. W.; Poole, M. Edna; Fokes, A.; Lynd, L. E. Div. II—Raymond, A. L., Low, Constance, equal; McRae, Caroline, Wilson, G. H., equal; Anglin, Jennie; Mackey, Minnie; McIntosh, Helen; Campbell, N. W., Kennedy, Fred. C., Mulloy, Lulu, Foster, B. Louise, equal; Bertram, Jean; Ockley, Beatrice. Div. III—Austin, Bessie; McNabb, Joseph; Patterson, Harriett; McArthur, Donalda; Dickson, Zilpha; Williams, Mary I.; Meldrum, G. E.; Hiscock, Mary B.; Edwards, J. J.

Mental Philosophy—Div. I, McIntosh, W. D.; Harkness, Mary D.; McEachern, Mary; McAskill, J.; Somerville, R. H.; Matheson, M.; Bland, C. H.; Cornett, A. D.; Hay, W. M.; Campbell, N. W.; Drysdale, F. W.; Hill, J.; Omond, M. N.;

Fraser, D. J. Div. II—Richardson, J. A.; Boak, A. E.; Carmichael, D. A.; Livingston, C. W.; McCuaig, H. D.; McFarlane, Annie; Usher, W. C.; Macgillivray, J. M.; Weir, W. J.; Wallace, S. A.; Low, Constance M.; Shaver, Alice; MacFarlane, Mary B.; McInnes, Isabel; Voaden, A.; Foik, H. J.; Edwards, J. J.; Smith, G. H.; Mackenzie, Winewood; Lindsay, Muriel; Paul, C. A.; Gilmour, A.; McIntosh, C. R.; Pratt, Pauline I.; Odell, Lena; Rintoul, A.; Ashman, G. H.; Calhoun, Kathleen; Hooper, C. H. Div. III—Dunham, C. S.; Clancy, G. S.; Dingwall, W. A.; Burns, C. J.; McInnes, G. L.; Hallett, W. J.; McArthur, D. A.; McPherson, P. G.; Easson, R. C.; Donald, Jean; Smart, R. S.; McGlennon, A. C.; Grass, Margaret; Urquhart, J. R.; Ferguson, J. D.; White, H. P.; Caverley, D. C.; Gillies, D. A.; Robinson, Mabel; Cornett, W. F.; Scott, R. A.; Cameron, D. R.; Workman, H. C.; Kerr, M.; O'Donnell, Florence; Robinson, J. C.; McRae, A. R.; Lowe, Maysie; Fockler, C. E.; Rowe, Rebecca; Montgomery, A. R.; Dewey, W. G.; Miller, Emma; McIlroy, C.

Moral Philosophy—Div. I, McDonald, R. J.; Uglow, W. L.; Everts, H. A.; Thompson, B. W.; Simmons, G. E.; Buchanan, J. D.; Montgomery, I. A., Williamson, Florence, equal; Lindsay, Muriel; Dingwall, R. Div. II—Stevenson, R. M.; Shaver, Alice, Atwater, H. E., equal; Platt, G. A.; Watt, W. J.; McEachern, Mary, Finlayson, D. K., equal; Amos, H. E., Finn, J. P., equal; Pringle, G. W.; Sharp, Helena A.; McKenzie, Maud, Shaver, J. M., equal; Grass, Margaret, Ferguson, W., equal; Knapp, E., Laing, A., equal; McLeod, N., Parsons, J. E., equal; Brown, P. W., Ellis, D., Salisbury, C. C., equal; Farnham, M. M., Law, C. E., equal; Rhoades, H. G., Weaver, Maud, equal. Div. III—McLean, Marion; Foik, H. J., Clugston, J. F., equal; Ostrom, Ethel; McCrimmon, J. R.; Cooper, A. B., Donald, Helen, equal; Houghton, C.; Chapman, W. F.; Scott, Jean.

Economics—Div. I, McInnes, Isabel; Atwater, H. E.; McArthur, D. A.; Cornett, A. D., Lane, D. J., equal; McCallum, J. F.; Buchanan, J. D., Downey, R. F., equal. Div. II—Shaver, J. A.; Montgomery, I. A.; Bell, F. C.; Parsons, J. E.; Jewett, T. J.; Pringle, G. W.; Stott, W.; Beecroft, W. A.; Young, J. H.; Gillies, D. A. Div. III—Wood, G. C.; Ferguson, Eleanor, McGillivray,, J. M., equal; McPherson, P. G.; Clugston, J. F.; McAskile, J.; McCrimmon, J. R.; Weaver, A. H. Maud; Gilchrist, W. A.; Richardson, J. A.; McInnes, G. L.; Finn, J. P.; Moffatt, W. J.; Fockler, C. E.; McCuaig, H. D.; Little, A. M.; Miller, Emma; Code, S. W. A.; Law, C. E. L. H.; Rafter, R.; Leggett, R. H.; VanDusen, E.; Salisbury, C. C.; Scott, Jean; Sully, L. K.

Politics—Div. I, Buchanan, J. D.; Simmons, G. E.; Ramsay, D. C.; MacArthur, D. A.; MacCallum, J. F. Div. II—Sommerville, R. H.; Atwater, H. E.; Shaver, J. A.; Gillies, D. A.; Stott, W. Div. III—Thompson, B. W.; MacGillivray, J. M.; Ferguson, W.; Macpherson, P. G.; Montgomery, I. A.; Ferguson, Eleanor K.; Bell, F. C.; MacDonald, J.; Stewart, Lily D.; Matheson, M.; Laing, A.; Code, S. W. A.

Junior Mathematics—Div. I, Hamilton, J. R.; Malloch, T. A.; McDonell, A. D. Div. II—Ferguson, Eleanor; Graham, C. R.; Eby, O. S.; Caverly, C.; McInnes, Isabel; Pringle, G. W. Div. III—Scott, Elizabeth; McEachran, J. G.; Wilson, A.; Lavell, Marion F.; Lane, D. J.; Wilson, G. H.; Gordon, J. B.; McKiel, H.; McDonald, J.; Young, J. H.; MacDonald, N. S.; Spankie, H.; Davidson, Edythe; Grover, J. I.; Little, A. M.; Bright, A.; Lipman, A.; Tulley, C. J.; Mallen, L.; Gilchrist, W. A.; Chatterton, Anna; Down, G. W.; Kirkpatrick, W. H.; Powell, Essie; Haycock, Margaret; Wilson, Dorothy; McRae, A. R.; Simpson, J. M.; McCammon, J. G.; Nesbit, Mabel; Miller, Emma M.; Liggett, R. H.; Alford, Ethel.

Senior Mathematics—Div. I, Usher, W. C.; Bowen, N. L.; Clark, H. J.; Hamilton, W. J. Div. II—Sine, F. L.; Turner, N. L.; Easson, R. C. Div. III—Whinton, W. E. H.; Scott, R. A.

Junior Physics—Div. I, Bowen, N. L., Wood, A. V., equal; Wallace, W. G.; MacEachran, Mary; MacDonnell, A. D. Div. II—Polson, J. A.; Gibson, Ethel; Tully, C. J. Div. III—MacKenzie, Jessie J.; Robb, D.; Goodfellow, J. J.; Solmes, Henrietta M.; Bongard, Edna; Dunham, C. S.; MacDermott, J. J.; Beggs, W.; Drummond, L. E.; Scott, R. A.

Senior Physics—Div. I, Fraser, D. J.; Cornell, M. L.; Kingston, H. R.; Pomeroy, J. C.; Wood, A.; Kidd, G. E. Div. II—Easson, R. C.; Usher, W. C.; Stillwell, G. B.; MacIlroy, C.; Walker, A. J.; Polson, J. A. Div. III—Brown, D.; Kane, J. M.; Tanton, F.; Whinton, W. E. H.; Pratt, Pauline J.

Pass Botany—Div. I, Doolittle, Jasper; Stead, J. H.; Wallace, W. G.; Lindsay, Muriel, Schofield, S. J., equal; Gibson, Ethel, Ostrom, Ethel, equal; Letherland, A., Malloch, G. S., equal; Anglin, S. M., Dunham, C. S., Low, Constance M., equal; Reynolds, B. C.; Goodfellow, T. J.; Hofferd, G. W.; Laidlaw, R. J.; Raymond, A. L.; Huff, John S., Williamson, Florence, McCammon, J. Gordon, Reynolds, Lillian, equal; Grass, Margaret, Bryson, Isabel. Div. II—Nicol, John; Tuck, J. R.; Finlayson, D. K.

Medical Botany—Div. I, Carmichael, D. A.; Losee, J. R.

Animal Biology—Div. I, Michell, Kathleen; Asselstine, Lizzie; Sully, L. K. Div. II—Huff, John; Goodfellow, T. J.; Pringle, G. W.; Spotswood, Edna; Wallace, W. G.; McCallum, J. F.; Alford, Ethel; Burns, Olive; Laidlaw, R. J.; Miller, Edna; O'Connell, Marguerite; Robb, D.; McDunnough, J. H. Div. III—Thompson, B. W.; Williamson, Florence; Hofferd, W. G.; Stewart, Lily; Tulley, C. J.; Weaver, Maud; Beggs, W.; Green, Edythe; Carmichael, D. A.; McKinnon, G. W.; Ellis, R. J.; Hughes, Ada; Gibson, Ethel; Anglin, S.; Houston, J. A.; Scott, Jean M. C.; Black, Norman; Snyder, H. A.

Junior Chemistry—Div. I, Lipman, A.; Kidd, A.; Brownlee, W. F.; McKiel, H. Div. II—McEachern, Mary; Gordon, J. B.; Wood, A. V.; Reynolds, Lillian; Burchill, A. M.; Macgregor, Grace. Div. III—Gardiner, J. N.; Beggs, W.; Letherland, A.; Tully, C. J.; Haycock, Margaret; Lavell, Marion; Barker, R. R.; Grover, J. I.

Senior Chemistry—Div. I, Wallace, W. G.; Bowen, N. L.; Brown, W.; Kidd, G. E.; Dunham, C. S.; Leitch, G. C.; Polson, J. A.; Robb, D.; Sine, F. L.; Brownlee, W. F.; Goodfellow, T. J. Div. II—Huff, J. S. Div. III—Grover, J. I.; Jordan, D.; McGill, A. B.

Elementary Mineralogy and Blowpipe Analysis—Div. I, Malcolm, W.; Bowen, N. L.; Sine, F. L. Div. II—Turner, N. L.; Grover, J. I.; Brown, D. Div. III—Bell, F. C.; Brownlee, W. F.

Geology—Div. I, Kidd, G. E. Div. II—Guy, R. D.; Hill, James; Dunlop, H.; Richardson, J. A.; Tully, C. J. Div. III—Murdy, A. M.; Stead, J. H.; Scott, R. A.

ARTS HONOUR LISTS, APRIL, 1905.

Latin, Preliminary—Class I, Penney, Elizabeth K.; Boak, A. Class II—Osgoode, J. A.; Dingwall, R.; Dunlop, Florence. Class III—McRae, Caroline; Tod, A. S.

Latin, Final—Class I, Brydon, R.; Crawford, C. M., Macdonnell, J. M., equal. Class II—Cram, W. S.

Greek, Final—Class I, Munro, P. F., B.A.; Connor, Grace L. Class II—McLean, R. A., B.A.; Brydon, R.

Greek, Preliminary—Class I, Boak, A. E.; Dingwall, R.; Cram, W. S.; Cameron, A. G. Class II—Osgoode, J. A.; McRae, Caroline J.; McKinnon, G. W. Class III—Tod, A. S.; Stothers, Minerva E.; Harrison, F. W.

German, Preliminary—Class I, Baird, A. W.; Edwards, J. J. Class II—Mackintosh, Helen C. Class III—Patterson, Harriet; Poole, M. Edna; Maclennan, C. Lillie, Odell, L., equal; Solmes, Harriette; Bongard, Edna; Donald, Helen; Hughes, Ada.

German, Intermediate—Class II, Cathro, Elizabeth D. Class III —O'Connell, Marguerite E.

German, Final—Class I, Dadson, Helena; Hawes, Ida. Class II—Ettinger, J. G.; Singleton, Jessie W. Class III—Black, N. F.; Hiscock, Reta; Pound, F. J.

French, Preliminary—Class I, Harkness, Mary; Baird, A. W., McLean, Marion, equal; Mackintosh, Helen. Class II—Austin, Bessie; Solmes, Harriette; Hughes, Ada. Class III—Poole, Edna; Ettinger, J. G.; Edwards, J. J.; Anglin, Jennie; Bongard, Edna; Finn, J. P.; Shaver, Alice; Patterson, Harriet; Scott, Jean M. C.

French, Final—Class I, Black, N. F.; Robertson, J. B.; Asselstine, Elizabeth; Hawes, Ida E.; Hay, W. McD.; Bothwell, A. M. Class II—Hewton, Gertrude; Singleton, Jessie W.; Dadson, Helena; Munro, Maggie B. Class III—Berney, Laura; MacKenzie, Maude E.; Hiscock, Reta.

English, Preliminary (*Anglo-Saxon*)—Class I, McDonald, R. J.; Alford, Ethel; Asselstine, Lizzie; Ramsay, D. C.; Russell, Ella; Scott, Bessie M. Class II—Livingston, C. W.; Duncan, T. S.; Nicol, John L.; Gordon, Wilhelmina; McRae, Caroline J.; Boland, W. A.; McLean, Marion; Edwards, J. J.; Elliott, Elliott, Emily M.; Harkness, Mary D.; Low, Constance, M.; O'Connell, Marguerite E. Class III—Scott, Carrie; Anglin, Jennie M.; Beecroft, W. A.; Roddick, A. M.; Amoss, Harold E.; McPherson, P. G.; Baird, A. W.; McConkey, Eva; Fokes, A.; Patterson, Harriet; Dunlop, Florence.

English, Intermediate—Class I, Macdonnell, J. M. Class II—Osborne, N. A.; Bell, F. C.; Harkness, Mary D. Class III—Mackintosh, Helen C.; Mulloy, L. W.; Burns, Olive; Couch, Samuel; Laidlaw, R. J.

English, Final—Class I, Gordon, Wilhelmina, Uglow, W. L., Brown, G. A., Saunders, Elsie E., equal; Elder, Hosie; Black, N. F.; Michell, Kathleen; Swanson, W. W.; Boland, W. A.; Wormwith, N. B. Class II—Dadson, Helena; McGregor, D. A. Class III—Bryson, Isabel; Williams, Mary I.; Platt, G. A.; Hay, W. M.

Final Honors A—Class II, Cathro, Elizabeth D.

History, Preliminary—Russell, Ella; Michell, Kathleen; Elliott, Emily; Clark, H. M.; Roddick, A. M.; Mulloy, L. W. R.

History, Final—May, Humphrey; Bothwell, A. M.; Morden, D. M.; Macgillivray, Florence; O'Donnell, Florence; McConkey, Eva.

Philosophy, Preliminary—Class II, Macdonnell, Logie; Kennedy, W. A.; McDonald, J. M. Class III—Wood, H. S.

Philosophy, Final—Class I, Chambers, L. P.; McDougall, L. M. Class II—McLeod, K. C.; Solandt, D. M. Class III—Hadden, A. T.

Political Science, Preliminary—Pringle, J. F.; Gibson, Ethel; Finlayson, D. K.; Mulloy, L. W. R.; Beveridge, R. W.

Political Science, Final—Class I, Swanson, W. W.; Beckett, S. E.; Polson, S. M.; Boland, W. A.; McGregor, D. A.; Wormwith, N. B. Class II—Kidd, A. J. Class III—Penman, A. G.; Fleming, W. S.

Mathematics, Preliminary—Bland, C. H.; Miller, Cora; Orr, W. G.; Cornell, M. L.; Dwyer, W. O.; Fraser, D. G.; Wright, R.

Mathematics, Final—Class I, Malcolm, L.; Asselstine, E. B. Class II—Anning, N.; Pearce, W. R.; Grove, W. G.; Fairlie, J. Class III—McKay, J. M. Group II—Coon, H.; Asselstine, O.; Leitch, G. C.; Ellis, D. S.

Syn. S. Geom. and Sph. Trig.—Whitehead, J.

Calculus only—Pentland, G. E.

Sph. Trigonometry and Astronomy—Millar, Cora.

Physics, Preliminary—Class I, Asselstine, O., Coon, H. T., equal. Class III—Ellis, D.; Whitehead, J.

Experimental Honor Physics—Class I, Sine, F. L. Class II—Speers, J. A.; Fetterly, H. B.

Botany, Preliminary—Class I, Malcolm, W.; Fetterly, H. B.; Sharpe, Helena; Stead, J. H.; Twohy, Henrietta; Moffat, W. J.; Hofferd, G. W.; Williams, L. J. Class II—Speers, J. A.; Schofield, S. J.

Animal Biology, Preliminary—Class I, Malcolm, W.; Polson, James; Usher, W. C.; Dunlop, H. Class II—Stead, J. H. Class III—Jordan, Dennis; Workman, Harold; Cornett, W. F.; Letherland, A.; Farnham, M.; Hughes, R. A.; Hofferd, G. W.; Roberts, W. C.

Animal Biology, Final—Class I, Knapp, E.; Raymond, A. L.; Cameron, D. R. Class III—Scott, R. A.

Chemistry, Preliminary—Class I, Usher, Claude; Schofield, S. J.; Farnham, M. M. Class II—Hill, J.; Murday, A. M., Williams, L. J., equal; Stead, J. H., Turner, N. L., equal; Froats, J. Class III—Donevan, F. J.; Gillies, D. A.; Workman, H. C.

Chemistry, Final—Class I, Speers, J. A.; Morden, G. W.; Fetterly, H. B.; Cameron, D. R.; Guy, R. D.; Knapp, E.

Mineralogy, Preliminary—Class I, Malcolm, W.; Schofield, S. J. Class II—White, H. T.

Mineralogy, Final—Class I, Guy, R. D.

Geology, Preliminary—Class II, White, H. T.

Petrography and Economic Geology only—Class II, Guy, R. D.

PRACTICAL SCIENCE.

SUPPLEMENTAL EXAMINATIONS, SEPTEMBER, 1904.

Junior Chemistry—Murphy, A. A.; Malloch, E. S.; Peppard, Hugh; Cooper, R. H.

Trigonometry of Mathematics I.—Oswald, W. A.

Mathematics II.—Dobbs, G. G.; Richardson, G. T.; Cartwright, C. T.; Strachan, B. O.; Sears, J.

Spherical Trigonometry and Astronomy—Johnston, W. A.

Astronomy I.—McLaren, W. M.

Physics II.—Timm, W. B.

Descriptive and Determinative Mineralogy—Drummond, L. E.

Optical Mineralogy—McEwen, D. F.

Geology I.—Struthers, W. E.; Speers, J. A.

Metallurgy I.—Keith, G. C.

Metallurgy II.—Drummond, L. E.

Thermodynamics I.—Walkem, H. C.; McEwen, R. L.

Thermodynamics II.—Thompson, A. T.

Municipal Engineering—Sears, J.

Electrical Engineering I.—Cumming, A. L.; McEwen, R. L.; Anson-Cartwright, R. H. M.; Walkem, H. C.

Electrical Engineering IV.—Thompson, A. T.

Electrical Engineering V.—Thompson, A. T.

Mechanical Engineering I.—Gage, R. G.; Keith, G. C.

Mechanical Engineering II.—Scott, H. H.; Walkem, H. C.; Gage, R. G.; McEwen, R. L.

Mechanical Engineering IV.—Drummond, L. E.

Descriptive Geometry—Dobbs, G. G.; Johnston, W. A.; Strachan, B. O.; Sutherland, T. F.; Anson-Cartwright, R. H. M.

Mechanism—Sutherland, T. F.

Drawing I.—Gleeson, L.; Woolsey, W. J.

Mapping I.—Johnston, W. A.; McGinnis, W. C.

Graphical Statics—Cartwright, C. T.; Anson - Cartwright, R. H. M.; Sutherland, T. F.

Surveying I.—Timm, W. B.; McGinnis, W. C.; Coe, A. P.; Richardson, G. T.

General Engineering I.—Richardson, G. T.; McGinnis, W. C.

General Enginering II.—Sutherland, T. F.; Cartwright, C. T.; Cumming, A. L.; Cartwright, R. A.

Engineering Field Work I.—Potter, Robt.; McPhail, J. G.; Cunningham, Stanley; Timm, W. B.; Garrow, R. M.; Smith, S. G.; Robertson, J. F.; McEwen, D. F.; Fee, Thos.

SESSIONAL EXAMINATIONS, APRIL, 1905.

Junior English—Div. I, Stidwell, F.; Stott, J.; McColl, C. R. Div. II—Harding, W. M.; Sweezey, R. O.; Cummings, A.; Saunders, H. C.; Goodwin, W.; McKay, Bert; Orford, C. Div. III—McEachern, J. J.; Brown, C. D.; Watson, A. R.; Campbell, W. E.; Campbell, W. M.; Houston, J. H.; Fleming, H.; Dempster, H. O.; Malloch, E. S.; McCandless. I.; Mateer, T. J.; McGinnis, T. A.; Cordukes, J. P.; Agnew, C.; Toffey, F. H.; Stewart, A. G.

Mathematics I., Algebra—McColl, C. R.; Orford, C.; Campbell, W. E.; Stidwell, F.; Cummings, A.; Mateer, T. J.; Carson, F.; Harding, W. M.: Watson, A. R.; McEachern, J. J.; Brown, C. D.; Cordukes, J. P.; Fleming, D. B.; Stanley, O.; McKay, B. R.; Daley, J.; Gardiner, J. N.; Bennett, J.; Saunders, H. C.; Milliken, J. B.; Goodwin, W. M.; Gleeson, L.; Faucher, C. A.; Jeffery, R. T.; Stewart, A. G.; Jackson, F. C.; Fleming, H.; Houston, J. H.; Jeffery, J. J.; Richmond, D. W.; Agnew, C. W.; Sweezey, R. O.; Stott, J.; Norrish, B. E.; Dempster, H.; Baker, F. G.; Roberts, W. H.; Swift, C. J.; Maguire, J. D.; Campbell, W. M.; Arthur, A.

Mathematics I., Geometry—Stidwell, F.; McColl, C. R.; Orford, C.; Campbell, W. E.; Cummings, A.; McEachern, J. J.; Jeffery, R. T.; Harding, W. M.; Daley, J.; Baker, F. G.; McKay, B. R.; Cumming, A. L.; Stott, J.; Goodwin, W. M.; Carson, F.; Gardiner, J. N.; Richmond, D. W.; Mateer, T. J.; Watson, A. R.; Faucher, C. A.; McCandless, I.; Fleming, D. B.; Brown, C. D.; Holland, A. A.; Jeffery, J. J.; Stanley, O.; Houston, J.; Saunders, H. C.; Fleming, A. A.; Dempster, H. O.; Sweezey, R. O.; Campbell, W. M.; Milliken, J. B.; Norrish, B. E.; Fleming, H.; Cordukes, J. P.; Bennett, J.; Stewart, A. G.; Maguire, J. D.; Arthur, A. J.; Gleeson, L.; Oswald, W. A.; Toffey, F. H.; Birkett, E. H.; Jackson, F. C.; Pound, R.

Mathematics I., Trigonometry—McColl, C. R.; Orford, C.; Harding, W. M.; Stidwell, F.; Cummings, A.; Mateer, T. J.; Campbell, W. E.; McEachern, J. J.; Stanley, O.; McKay, B. R.; Jeffery, J. J.; Gleeson, L.; Brown, C. D.; Jeffery, R. T.; Faucher, C. A.; Saunders, H. C.; Stott, J.; Thornton, L. A.; Fleming, H.; Houston, J. H.; Gardiner, J. N.; Potter, R.; Dempster, H. O.; Holland, A. A.; Stewart, A. G.; Cunningham, S. L.; Watson, A. R.; Arthur, A. J.; Cordukes, J. P.; Carson, F.; Campbell, W. M.; Jackson, F. C.; McGinnis, T. A.; Milliken, J. B.; Norrish, B. E.; Bennett, J.; Sweezey, R. O.; Daley, J.; Richmond, D. W.; Fleming, D. B.; Goodwin, W. M.; Fleming, A. A.; Roberts, W. H.; McCandless, I.; Pound, R.

Astronomy I.—Stidwell, F.; Cummings, A.; Campbell, W. E.; McColl, C. R.; Jeffery, R. T.; Harding, W. M.; Milliken, J. B.; Jeffery, J. J.; McEachern, J. J.; McArthur, F. T.; McKay, B. R.; Richmond, D. W.; Stott, J.; Mateer, T. J.; Calvin, J. D.; Pringle, J. F.; Grant, A. M.; Baker, F. G.; Carson, F.; Goodwin, W. M.; Corbett, R. A.; Nicoll, H. W.; Jackson, F. C.; Smith, S. G.; Saunders, H. C.; Brown, C. D.; Sweezey, R. O.; Scott, A. W.; Gardiner, J. N.; Potter, R.; Agnew, C. W.; Daley, J.; Orford, C.; Cunningham, S. L.; Fleming, J. E.; Campbell, W. M.; Cordukes, J. P.; Fleming, H.; Holland, A. A.; Houston, J. H.

Mathematics II., average—Calvin, J. D.; Herriot, G. H.; Matheson, H.; Houser, W. H.; Jenkins, W. E.; McKay, G. J.; Lazier, S.; McKenzie, M.; Wright, G. C.; Germain, H. A.; Akins, J. R.; Brown, E. W.; Woolsey, W. J.; Alder, W. R.; Thornton, L. A.; Wright, A.; Haddow, A. W.; King, J. L.; Browne, P. J.; Orr, F. O.; King, S.; Curtin, C. J.; Stiles, L. P.; Code, L. B.; Peppard, H.; Bailie, A. A.; McPhail, J. G.; Rogers, W. R.; Jackson, G. J.; Grant, A. M.; McClennan, W. D.; Lavoie, E.

Spherical Trigonometry and Astronomy—Herriot, G. H.; Houser, W. H.; McKenzie, M.; Haddow, A. W.; Matheson, H.; McKay, G. J.; King, S.; King, J. L.; Orr, F. O.; Bartlett, J.; Jenkins, W. E.; Wright, G. C.; Lazier, S.; Lavoie, E.; Calvin, J. D.; Sands, J. M.; Woolsey, W J.; Jackson, G. J.; Alder, W. R.; Murphy, A. A.; Potter, R.; Rogers, W. R.; Akins, J. R.; Trueman, J. D.; Malloch, E. S.; Bailie, A. A.; Ostrom, S. A.; Malloch, G. S.; Irwin, R. T.; McArthur, F. T.; McClennan, W. D.; Brown, E. W.; Brewster, F. A.; Germain, H. A.; McPhail, J. G.; Grenon, J. F.

Physics I.—Div. I, Cummings, A.; McColl, C. R.; Campbell, W. E.; Pringle, J. F.; Stanley, O.; Mateer, T. J.; Jeffrey, R. T.; Grant, A. M. Div. II—Orford, C.; Harding, W. M.; Stidwell, F.; Baker, F. G.; Stott, J.; Jeffrey, J. J.; Goodwin, W. M.; Gardiner, J. N. Div. III—Brown, C. D.; Saunders, H. C.; Jackson, F. C.; Carson, F. C.; McKay, B. R.; Norrish, B. E.; McEachern, J. J.; Grover, J. I.; Milliken, J. B.; Richmond, D. W.; Agnew, C. W.; Arthur, A. J.; Campbell, W. M.; Stewart, A. G.; Gleeson, L.

Physics I. (*A only*) *Dynamics*—Div. II, Holland, A. A. Div. III—Bennett, J.; Dempster, H. A.; Gardner, K. V.; Birkett, E. H.; Fleming, H.; Cooper, R. H.; Sweezey, R. O.; McCandless, I.; Fleming, A. A.; McGinnis, T. A.

Physics I. (*B only*) *Experimental*—Div. III—Faucher, C. A.; Fleming, D. B.

Junior Physics—Div. III, Drummond, L. E.

Physics II.—Div. I, Matheson, H.; Germain, H. A.; McKay, G. J.; Calvin, J. D.; Jenkins, W. E.; Orr, F. O.; Sands, J. M.; Herriott, G. H.; Trueman, J. D. Div. II—McClennan, W. D.; Rogers, W. R.; Cumming, A. L.; McKenzie, M.; Robertson, J. J.; Peppard, H.; Haddow, A. W. Div. III—Akins, J. R.; Lazier, S.; Smyth, W. L.; Browne, P. J.; Code, E. S. L.; Dobbs, G. G.; King, J. A. S.; Alder, W. R.; Houser, W. H.; McArthur, F.; McEwen, D. F.; King, J. L.; Potter, R.; Murray, C. W.; Oswald, W. A.; Richardson, G. T.

Physics III.—Div I, Germain, H. A.; McClennan, W. D. Div. II—Oswald, W. A.; Grant, A. M.

Physics IV.—Div. II, Mackenzie, H. A.; Berney, K. C. Div. III—Code, L. B.; Millar, R.; Lennox, J. S.

Junior Chemistry—Div. I, McColl, C. R.; Orford, Colin; Campbell, W. E.; Mateer, T. J.; Watson, A. R.; Stidwell, Frank; Cummings, Alfred; McEachern, J. J. Div. II—Harding, W. M.; Jeffrey, J. J.; Stott, James; Marshall, John; Milliken, J. B.; McKay, B. R.; Bennett, Joseph; McCandless, I.; Fleming, H. Div. III—Cordukes, J. P.; Saunders, H. C.; Jeffery, R. T.; Houston, J. H.; Nicoll, H. W.; Agnew, C. W.; Holland, A. A.; Stewart, A. G.; Baker, F. Godfrey; Stanley, O.; Fleming, D. B.; Sweezey, R. O.; McGinnis, T. A.; Norrish, B. E.; Birkett, E. H.; Fleming, J. E.; Toffey, F. H.; Richmond, D. W.; Swift, C. James; Browne, P. J.; Pennock, E. L.; Dempster, O.; Pound, R.; Speirs, T.

Senior Chemistry—Div. I, Trueman, J. D.; Herriot, G. H.; Sands, J. M.; Matheson, H.; McKay, G. J.; Wright, G. C.; McKenzie, M.; Jenkins, W. E. Div. II—Calvin, J. D.; Houser, W. H.; McClennan, W. D.; Rogers, W. R.; Lazier, S.; Murray, C. W. Div. III—Brown, E. W.; King, J. L.; Twitchell, K. S.; Germain, H. A.; Brewster, F. A.; Orr, F. O.; Arthur, A.; Oswald, W. A.; Akins, J. R.; Grant, A. M.; King, S.; Peppard, H.; Drummond, L. E.; Irwin, R. T.; Murphy, A. A.

Senior Chemistry, Metals only—Div. III, McEwen, R. L.

Organic Chemistry—Div. III, Coe, A. P.

Qualitative Analysis—Div. I, McEwen, D. F.; McKay, G. J.; Matheson, H. Div. II—Garrow, R. M.; Jackson, G. J.; Akins, J. R.; Haddow, A. W.; Fleming, A. A. Div. III—Fee ,Tom; Irwin, R. T.; McLaren, W. M.

Chemistry of Explosives—Div. I, Thornton, L. A. Div. II—Rice, F. W.; Johnston, W. A.

Quantitative Analysis and Assaying—Div. I, Connell, F. M. Div. II—Shorey, P. M.; Dobbs, G. G.; Robertson, J. J.; Richard-

son, G. T.; Woolsey, W. J.; Timm, W. B.; Weld, W. E. Div. III—Fleming, A. G.; McGinnis, W. C.; McLaren, W. M.

Physical Chemistry I.—Div. II, Lennox, J. S.; Berney, K. C., Code, L. B., equal; Finnie, H. V. Div. III—Millar, T. R.

Physical Chemistry II.—Div. I, Montgomery, O. M.; Way, W. C. Div. III—Baker, C. W.

Elementary Mineralogy and Blowpipe Analysis—Div. I, Trueman, T. D. Div. II—Akins, J. R. Div. III—Brown, E. W.

Systematic Mineralogy—Div. I, Trueman, J. D.

Optical Mineralogy—Div. I, McKay, G. T.; Matheson, H. Div. II—Haddow, A. W.; Alder, W. R.; Akins, J. R. Div. III—Murray, C. W.; Twitchell, K. S.; Fleming, A. A.; Irwin, R. T., Orr, F. O., equal; Weld, W. E.

Descriptive and Determinative Mineralogy—Div. I, Malloch, G. S. Div. II—Timm, W. B.; Robertson, J. J.; McEwen, D. F.; Shorey, P. M. Div. III—Richardson, G.; Dobbs, G. G.; McGinnis, W. C.

Geology I.—Div. I, Herriot, G. H.; McKenzie, M.; McKay, G. J.; Matheson, H.; McCulloch, R. M. Div. II—King, J. S.; Haddow, A. W.; Sands, J. M.; Rogers, W. R.; Jenkins, W. E.; Wright, G. C.; Lazier, S.; Campbell, A. S.; Orr, F. O.; Houser, W. H.; Robertson, J. J.; Murray, C. W.; Jackson, G. J.; Brown, E. W.; Twitchell, K. S.; Trueman, J. D. Div. III—Akins, J. R.; King, J. L.; Irwin, R. T.; Peppard, H.; Calvin, J. D.; Ostrom, S. A.; McArthur, F. T.; Fleming, A. A.; Brewster, F. A.; Coe, A. P.; Rice, F. W.; Shaver, P. A.; Alder, W. R.; Potter, R.; Garrow, R. M.; McLaren, W. W.; Gardner, K. V.; Gillis, W. C.; Cooper, R. H.

Petrography I.—Div. II, Timm, W. B.; Shorey, P. J.; Robertson, J. J.; Richardson, G. T.; Dobbs, G. G.; McEwen, D. F. Div. III—McGinnis, W. C.; Strachan, B. O.

Economic Geology I.—Div. II, Shorey, P. M.; Dobbs, G. G.; Richardson, G. T.; McEwen, D. F. Div. III—Timm, W. B.; Connell, F. M.; Robertson, J. J.; McGinnis, W. C.

Geology of Canada, Geology II.—Div. II, McEwen, D. F.; Dobbs, G. G.; Timm, W. B. Div. III—Shorey, P. M.; Richardson, G. T.; Connell, F. M.

Geology, Petrography II.—Div. II, Malloch, G. S. Div. III—Dobbs, W. S.

Economic Geology II.—Malloch, G. S.; Bateman, G. C.; Cartwright, C. T.; Cairns, D. D.; Dobbs, W. S.; Sloan, D.

Geology III.—Div. II, Malloch, G. S.

Mining I.—Div. I, Shorey, P. M.; Robertson, J. J.; McEwen, D. F.; Dobbs, G. G. Div. II—Timm, W. B.; Weld, W. E.;

Richardson, G. T.; McGinnis, W. C.; Fee, T.; Connell, F. M.; Garrow, R. M. Div. III—McCulloch, R.; Smith, S. G.; McLaren, W. M.; Dunkley, J. B.

Mining II.—Div. I, Sloan, D.; Cairns, D. D.; Bateman, G. C.; Cartwright, C. T. Div. II—Collins, E. A.; Dobbs, W. S.

Mining Project and Designing—Cartwright, C. T.; Bateman, G. C.;Sloan, D.; Cairns, D. D.; Collins, E. A.

Milling.—Div. I, Cartwright, C. T.; Cairns, D. D. Div. II—Bateman, G. C.; Sloan, D.; Collins, E. A.

Mining Law—Div. I, Bateman, G. C.; Cairns, D. D.; Cartwright, C. T. Div. II—Collins, E. A.; Sloan, D. Div. III—Bartlett, J.; Dobbs, G. G.; Richardson, G. T.

Metallurgy I.—Div. I, Shorey, P. M. Div. II—Strachan, B. O.; Timm, W. B.; Dobbs, G. G.; Rice, F. W.; Berney, K. C. Div. III—Richardson, G. T., and Hill, J., equal; Garrow, R. M.; McLaren, W., Connell, F. M., Millar, T. R., Rogers, W. R., equal.

Ore Dressing—Div. I, Shorey, P. M.; Timm, W. B.; Dobbs, G. G., McCulloch, R., equal. Div. II—Robertson, J. J.; Richardson, G.; Weld, W. E. Div. III—McEwen, D. F.; Fee, T.; Garrow, R. M.; McGinnis, W. C.

Metallurgy II.—Div. I, Bateman, G. C.; Cairns, D. D.; Sloan, D. Div. II—Cartwright, C. T. Div. III—Collins, E. H.; Strachan, B. O.

Metallurgy III.—Div. II, Collins, E. A.

Electro Metallurgy—Div. I, Way, W. C.; Baker, C. W. Div. II —Montgomery, O. M.

Metallurgical Laboratory—Div. II, Collins, E. A.; Sloan, D.; Cairns, D. D.; Bateman, G. C.

Metallurgical Reading and Thesis—Collins, E. A.

Thermodynamics I.—Div. I, Berney, K. C.; McCulloch, R.; Finnie, H. V.; Lennox, J. L., Mackenzie, H. A., equal. Div. II —Pinkerton, W. A.; Cumming, A. L.; Rice, F. W.; Bailie, A. A.; Millar, T. R.; Code, L. B.; Johnston, W. A. Div. III—Timm, W. B.; Macphail, J. G.; Smyth, W. L.; Strachan, B. O.; Thornton, L. A.; Shorey, P. M., Wright, A., equal.

Thermodynamics II.—Div. I, Way, W. C.; Henderson, E. W. Div. II—Baker, C. W.; McIlquham, W. L.; Montgomery, O. M.; Scott, H. H. Div. III—Gage, R. G.; Smyth, W. L.

General Engineering I.—Div. I, McKay, G. J.; Houser, W. H.; Jenkins, W. E. Div. II—Herriot, G. H.; Matheson, H.; Rogers, W. R.; Calvin, J. D.; McKenzie, M.; Orr, F. O. Div. III—Lazier, S.; Dunkley, J. B.; Sands, J. M.; Akins, J.

R.; Peppard, H.; Fleming, A. G.; Potter, R.; Grant, A. M.; Murphy, A. A.; King, J. L.; Robertson, J. J.; Oswald, W. A.; Brown, E. W.; Campbell, A. S.; Jackson, G J.; Murray, C. W.; Lavoie, E.; McClennan, W. D.; Mitchell, R. S.; Curtin, C. J.; Gardner, K. V.; Gleeson, L. J.; Wright, G. C.; Woolsey, W. J.

General Engineering II.—Class II, Bartlett, J. S.; Thornton, L. A.; Johnston, W. A.; Rice, F. W.; Finnie, H.; Millar, R.; Lennox, J. S.; Timm, W. B. Class III—McCulloch, R.; McKenzie, H. A.; Robertson, J. J.; Shorey, P. M.; Macphail, J. G.; Berney, K. C.

Use of Explosives—Thornton, L. A.; Johnston, W. A.; Rice, F. W.

Municipal Engineering—Div. I, Johnston, W. A. Div. II—Shaver, P. A.

Railway Engineering I.—Div. I, Johnston, W. A. Div. II—Shaver, P. A.; Thornton, L. A.; Rogers, W. R. Div. III—Rice, F. W.; Smith, S. G.

Railway Engineering II.—Div. I, Rice, F. W.; Johnston, W. A. Div. II—Thornton, L. A. Div. III—Smith, S. G.

Railway Enigneering III.—Div. I, Johnston, W. A.

Electrical Engineering I.—Div. I, McKenzie, H. A.; Stiles, L. P.; Berney, K. C. Div. II—Lennox, J. S.; Pinkerton, W. A.; Rogers, W. R.; Denovan, J.; Matheson, H.; McKay, G. J.; Spiers, T.; Finnie, H. V.; Timm, W. B.; Rice, F. W.; Johnston, W. A. Div. III—McEwen, D. F.; Robertson, J. J.; Thornton, L. A.; McCulloch, R.; Bartlett, J.; Macphail, J. G.; Orr, F. O.; Wright, A.; Millar, R.; Shorey, P. M.; Browne, P. J.; Code, L. B.; Bailie, A. A.; Weld, W. E.; Keith, G. C.

Electrical Engineering II.—Div. I, MacKenzie, H. A.; Lennox, J. S. Div. II—Berney, K. C.; Spiers, T. Div. III—Millar, R.; Stiles, L. P.; Pinkerton, W. A.; Finnie, H. V.; Code, L. B.

Electrical Engineering III.—Div. I, Berney, K. C.; Finnie, H. V.; Spiers, T. Div. II—Millar, R.; Lennox, J. L.; Denovan, J.; MacKenzie, H. A. Div. III—Pinkerton, W. A.; Code, L. B.; Code, E. S. L.; Stiles, L. P.; Browne, P. J.

Electrical Engineering IV.—Div. I, MacIlquham, W. L.; Baker, C. W. Div. II—Henderson, E. W.; Way, W. C. Div. III—Montgomery, O. M.; Scott, H. H.; Gage, R. G.

Electrical Engineering V.—Div. I, Way, W. C. Div. II—Henderson, E. W.; Montgomery, O. M.; MacIlquham, W. L.; Baker, C. W. Div. III—Scott, H. H.; Gage, R. G.; Smyth, W. L.

Electrical Engineering VI.—Div. I, Way, W. C.; Montgomery, O. M. Div. II—Henderson, E. W.; Baker, C. W.; MacIlquham, W. L. Div. III—Gage, R. G.; Scott, H. H.

Hydraulics I.—Div. I, Henderson, E. W.; Way, W. C.; Montgomery, O. M.; Bateman, G. C.; Sears, J.; Scott, H. H.; MacIlquham, W. L.; Rice, F. W. Div. II—Cairns, D. D.; Sloan, D., Johnston, W. A., equal; Thornton, L. A.; Collins, E. A. Div. III—Baker, C. W.; Cartwright, C. T., Gage, R. G., equal; Smyth, W. L.; Cummings, A. L.; Smith, S. G.; Strachan, B. O.; Macphail, J. G.

Hydraulic Engineering II.—Div. II, Rice, F. W.; Johnston, W. A.; Thornton, L. A. Div. III—Smith, S. G.

Hydraulic Engineering III.—Div. I, Johnston, W. A. Div. III—Shaver, P. A.

Structural Engineering I.—Div. I, Johnston, W. A. Div. II—Rice, F. W.; Shaver, P. A. Div. III—Thornton, L. A.

Structural Engineering II.—Div. I, Johnston, W. A. Div. II—Shaver, P. A. Div. III—Grenon, J. F.

Structural Engineering IV.—Div. I, Sears, J.; Macphail, J. G. Div. II—Johnston, W. A.; Shaver, P. A.; Cumming, A. L.

Mechanical Engineering I.—Div. I, Berney, K. C.; Pinkerton, W. A. Div. II—Mackenzie, H. A.; Finnie, H. V.; Lennox, J. L.; Spiers, T. Div. III—Millar, T. R.; Code, L. B.; Bailie, A. A.; Denovan, J.

Mechanical Engineering II.—Div. I, Lennox, J. L.; Mackenzie, H. A.; Finnie, H. V. Div. II—Berney, K. C.; Code, L. B. Div. III—Millar, T. R.; Pinkerton, W. A.; Bailie, A. A.; Spiers, T.

Mechanical Engineering III.—Div. II, Bailie, A. A.

Mechanical Engineering IV.—Div. I, Bateman, G. C.; Sloan, D.; Sears, J. Div. II—Cairns, D. D.; Scott, H. H.; Cartwright, C. T.; Baker, C. W.; Collins, E. A.; Henderson, E. W.; Johnston, W. A.; Shaver, P. A. Div. III—Macphail, J. G.; Smyth, W. L.; Cumming, A. L.; Gage, R. G.; McEwen, R. L.

Mechanical Engineering V.—Way, W. C. Div. III—McEwen, R. L.

Mechanical Engineering VI.—Div. I, Way, W. C.

Mechanism—Div. I, Cartwright, C. T., Mackenzie, H. A., Scott, H. H.; equal; Bartlett, J., Bateman, G. C.; Cairns, D. D., Shorey, P. M., equal; Sloan, D.; Millar, T. R.; Berney, K. C., Code, E. S. L., Lennox, J. S.; Pinkerton, W. A., equal; Henderson, E. W.; Robertson, J. J.; McCulloch, R., Rice, F. W., Strachan, B. O., Timm, W. B., equal; Dobbs, G. G.,

Smyth, W. L., equal; McEwen, R. L., Finnie, H. V., equal; Code, L. B.; Collins, E. A., Weld, W. E., equal. Div. II—Wright, A.; Stiles, L. P.; Bailie, A. A.; Thornton, L. A. Div. III—Dunkley, J. B.; Richardson, G. V., Shaver, P. A., euqal; Spiers, T.; Connell, F. M.

Descriptive Geometry—Div. I, McKay, G. J.; Herriot, G. H.; Lazier, S.; McKenzie, M.; Matheson, H. Div. II—Grenon, J. F.; McClennan, W. D.; Germain, H. A.; Wright, G. C.; Sands, J. M.; Collins, E. A.; Sears, J.; Alder, W. R.; Murray, C. W.; Cumming, A. L.; Murphy, A. A. Div. III—Houser, W. H.; Haddow, A. W.; Calvin, J. D.; Macphail, J. G.; Peppard, H.; Brown, E. W.; Potter, R.; Lavoie, E.; Curtin, C. J.; Orr, F. O.; King, J. L.; Woolsey, W. J.; Gillis, W. C.; Cooper, R. H.; King, S.; Fleming, A. A.; Smith, S. G.; Twitchell, R. S.; Code, E. S. L.; Akins, J. R.; Shaver, P. A.; Irwin, R. G.; Gleeson, L. J.; Toffey, F. H.; Wright, A.; Jackson, G. J.; Brewster, F. A.; Dunkley, J. B.; Timm, W. B.

Drawing I.—Div. I, Bertram, T. S., Stott, J., equal; Harding, W. M.; McColl, R., Stanley; R. O., equal; Calvin, J. D.; Trueman, J. D., Saunders, H. C., equal. Div. II—McKay, B. R.; Cordukes, J. P.; Campbell, W. E.; Curtin, C. J.; Norrish, B. E.; Cummings, A., Robinson, L. A., equal; Orford, C.; Bennett, J.; Birkett, E. H., Stidwell, F., equal; Richmond, D. W., Cunningham, S. L., equal; Sweezey, R. O.; Nicoll, H. W.; Jackson, F., Baker, F. G., equal; Swift, J., Faucher, C. A., equal; Pringle, J. F.; Milliken, J. B.; Dalton, C. P.; Stewart, A.; McGinnis, T. A. Div. III—Pennock, E. L., Pound, R., Fleming, H., Fleming, D., Agnew, C. W., equal; Fleming, A. G.; Fleming, J. E.; Dempster, H. O.; Houston, J. H.; Campbell, W. M.; Cameron, D., Brown, D. C., equal; Arthur, A.; Holland, A. A.; Jeffrey, J. J.; Jeffrey, R. T.; Mateer, T.; Grenon, J. F.; McCandless, I.

Drawing II.—Div. I, McClennan, W. D.; Calvin, J. D.; Grant, A. M.; King, J. A. S.; Potter, R.; Irwin, R. T.; Sands, J. M.; Haddow, A. W.; Toffey, F. H.; McKay, G. J. Div. II—Peppard, H.; Herriot, G. H.; Gardner, K. V.; Murray, C. W.; Twitchell, K. S.; Matheson, H.; Wright, G. C.; Lavoie, E.; Alder, W. R.; Fleming, A. A.; Jenkins, W. E.; McArthur, F.; King, J. L.; Akins, J. R.; Curtin, C. J.; Brewster, F. A.; Lazier, S.; Gleeson, L. J.; Orr, F. O. Div. III—Jackson, J. G.; Houser, W. H.; Thornton, L. H.; Lavell, F. M.; Woolsey, W. J.; Cooper, R. H.; Gillis, W. C.; Ostrom, S. A.; McKenzie, M.; Campbell, A. S.; Murphy, A. A.; Brown, E. W.; Germain, H. A.; Richardson, G. T.; Connell, F. M.; Weld, W. E.; Dunkley, J. B.

Drawing III.—Div. I, McClennan, W. D.; Grant, A. M.; Toffey, F. H.; King, J. A. S. Div. II—Gleeson, L. J.; King, J. L. Div. III—Murphy, A. A.; Germain, H. A.

Drawing IV.—Div. II, Toffey, F. H.

Graphical Statics I.—Class III, Bartlett, J.; Berney, K. C.; Denovan, J.; Stiles, L. P.; Millar, R.

Graphical Statics II.—Class II, Thornton, L. A.; Rice, F. W.; Johnston, W. A. Class III—Macphail, J. G.; Robertson, J. J.; Shaver, P. A.; Cumming, A. L.

Mapping II.—Div. I, Wright, G. C.; Herriot, G. H.; Calvin, J. D.; Malloch, G. S.; Gillis, W. C.; Murray, C. W.; Jenkins, W. E.; Lavoie, E.; Sands, J. M.; Peppard, H.; Rogers, W. R.; Lazier, S.; McKay, G. J.; McKenzie, M.; Alder, W. R.; Orr, F. O.; Twitchell, K. S.; Houser, W. H.; King, J. L.; Cooper, R. H.; McArthur, F.; Graves, R. B.; Rice, F. W.; Akins, J. R. Div. II—Campbell, A. S.; Matheson, H.; Irwin, R. T.; Fleming, A. A.; Curtin, C. J.; Jackson, G. J.; Haddow, A. W.; Fleming, A. G.; Gardner, K. V.; Brown, E. W.; Ostrom, S. A.; Brewster, F. A.; Dunkley, J. B. Div. III—Gagnon, J. A.; McLaren, W. M.

Mapping III.—Div. I, Potter, R.; McEwen, D. F.; Thornton, L. A.; Grenon, J. F.; Fee, T.; Johnston, W. A.; Rice, F. W.; Shorey, P. M. Div. II—Weld, W. E.; Robertson, J. J.; Dobbs, G. G.; Timm, W. B.; Connell, F. M.; Richardson, G. T.; McGinnis, W. C.

Surveying I.—Div. I, Stidwell, F.; McColl, C. R.; McEachern, J. J.; Campbell, W. E.; Saunders, H. C.; Grant, A.; Cummings, A.; Stanley, O.; Orford, C.; Baker, F. G.; Jackson, F. C.; Pringle, J. F.; Jeffery, J. J.; Jeffery, R. T.; Houston, J. H.; Milliken, J. B.; Stott, J.; Brown, C. D.; Agnew, C. W. Div. II—Faucher, C. H.; Dempster, H. O.; Mateer, T. J.; Harding, W. M.; McKay, B. R.; Scott, A. W.; Richmond, D. W.; Holland, A. A.; Watson, A. R.; Cordukes, J. P.; McGinnis, T. A.; Norrish, B. E. Div. III—Pennock, E. L.; Roberts, W. H.; Nicoll, H. W.; Sweezey, R. O.; Campbell, W. M.; Fleming, D. B.; Stewart, A. G.; Birkett, E. H.; Bennett, J.; Swift, C. J.; McCulloch, R.; McCandless, I.

Surveying II.—Div. I, Herriot, G. H.; McKay, G. J.; Potter, R.; Sands, J. M.; McKenzie, M.; King, J. L.; Curtin, C. J.; Div. II—Murray, C. W.; Rice, F. W.; Jackson, G. J.; Matheson, H.; Rogers, W. R.; Jenkins, W. E.; Lazier, S.; Ostrom, S. A.; Wright, G. C.; Akins, J. R. Div. III—Haddow, A. W.; Lavoie, E.; Houser, W. H.; Irwin, R. T.; Calvin, J. D.; McArthur, F. T.; Gillis, W. C.; Orr, F. O.; Woolsey, W. J.

Surveying III.—Div. I, Thornton, L. A.; Johnston, W. A. Div.

II—Timm, W. B.; Potter, R.; McEwen, D. F.; Rice, F. W. Div. III—Macphail, J. G.; Shaver, P. A.; Shorey, P. M.; Richardson, G. T.; Robertson, J. J.; Connell, F. M.

Fire Assaying—Div. I, Richardson, G. T.; Usher, W. C.; Dobbs, G. G.; Garrow, R. M., equal; Connell, F. M., Shorey, P. M., equal. Div. II—Cameron, A. D., Knapp, E., Timm, W. B., equal; Fleming, A. G., Guy, R. D., McGinnis, W. C., Woolsey, A. J., equal. Div. III—McLaren, W. M., Hill, J., Coe, A. P., Curtin, C. J., equal.

THEOLOGY.

MATRICULATION, OCTOBER, 1904.

Brown, G. A.; Watt, W. J.; Black, B. S.; Kennedy, W. A.; Marshall, D. H.

SUPPLEMENTAL, NOVEMBER, 1904.

Junior Hebrew—Donnell, J. A.; Ferguson, J. J.; Stevenson, R. M.

Senior Hebrew—McKee, W. W.

B.D.—Flint—Solandt, D. M.; Whiting, C. C.

Holy Scripture, O. T.—Solandt, D. M.

Bruce—Cowan, H.; Whiting, C. C.

Atonement—Cowan, H.; McConachie, J. C.

Conception of God—McConachie, J. C.

The Church—McConachie, J. C.

Pfleiderer—Whiting, C. C.

Comparative Religion—Whiting, C. C.

Job—Petrie, J. A.

SESSIONAL EXAMINATIONS, 1905.

B.D. Examinations.

Church History—Apostolic Fathers, MacInnes, W.; Petrie, J. A.

Apostolic Fathers—MacInnes, W.; Petrie, J. A.

Church Institutions—MacInnes, W.

Church Doctrine—MacInnes, W.

Pfleiderer—Cowan, Rev. H.

Flint—Strachan, C. C.

Comparative Religion—Cowan, Rev. H.; Strachan, C. C.

Bruce—Miller, J. H.; Solandt, D. M.; Strachan, C. C.

Holy Scripture, N. T., General—McConachie, J. C.; MacInnes, W. H.; Solandt, Rev. D.; Wallace, H. T.; Whiting, C. C.

Holy Scripture, N. T., Special—McConachie, J. C.; MacInnes, W. H.; Solandt, D. M.; Wallace, H. T.; Whiting, C. C.

Conception of God—Cowan, Rev. H.; Millar, J. M.

Doctrine of Sin—McConachie, J. C.; Cowan, Rev. H.

The Church—Cowan, Rev. H.; Millar, J. M.

O. T. Exegesis, Selected Psalms—Wallace, H. T.; McConachie, J. C.; Macdonnell, L.; MacInnes, W. H.; Munro, M. F.; Whiting, C. C.; Lindsay, M. A.

Pilgrim Psalms—Wallace, H. T.; MacInnes, W. H.; Whiting, C. C.; Hutcheson, J. A.

Holy Scripture, O. T.—Wallace, H. T.; MacInnes, W. H.; Whiting, C. C., McConachie, J. C., equal.

Hexateuch—Petrie, J. A.; MacInnes, W. H.

O. T. History—Wallace, H. T.; Macdonnell, L.

Prophetic Literature—Whiting, C. C.

Aramaic—Petrie, J. A.; Whiting, C. C.; Munro, M. F.

PASS EXAMINATIONS.

Church History—Div. I, Beckett, S. E.; Brown, G. A.; Donnell, J. A.; Hutchison, J. H.; Kidd, W. J.; Macdonnell, Logie; MacInnes, W.; MacQuarrie, W. J.; Munro, M. F.; Strachan, C. C.; Wallace, H.; Whiting, C. C. Div. II—Bright, A.; Black, B. S.; Beveridge, R. W.; Cameron, A. E.; Ferguson, J.; Kidd, C. E.; Kennedy, W. A.; Lindsay, M. A. F.; Macdonald, J. A.; McConachie, J. C.; McKeracher, D. A.; Miller, J. H.; Stevenson, R. McK.; Stewart, J. L.; Watt, W. J.; Woods, I. H. Div. III—Caldwell, J. S.; MacKinnon, J. D.; Stewart, D. J.

History of Dogma—Beckett, S. E.; Beveridge, R. W.; Black, B. S.; Bright, A.; Brown, G. A.; Caldwell, J. S.; Cameron, A. E.; Donnell, J. A.; Ferguson, J.; Hutcheson, J. H.; Kennedy, W. A.; Kidd, C. E.; Kidd, W. J.; Lindsay, M. A. F.; MacDonald, J. M.; McConachie, J. C.; Macdonnell, L.; MacInnes, W.; McKeracher, D. A.; MacKinnon, J. D.; MacQuarrie, W. J.; Millar, J. H.; Munro, M. F.; Stevenson, R. M.; Stewart, J. A.; Stewart, D. J.; Strachan, C. C.; Wallace, H. T.; Watt, W. J.; Whiting, C. C.; Woods, I. H.

Junior Hebrew—Div. I, Ferguson, William; Everts, H. A.; Bright, A.; McCuaig, H.; Black, B. S.; Morden, D. N.; Scott, R. A.

Senior Hebrew—Div. I, Stevenson, R. M. ; Watt, W. J. Div. II—

Senior Hebrew—Div. I, Stevenson, R. M.; Watt, G. Div. II—Macdonald, J.; Bright, A.; Brown, G. A.; Stewart, G. A. Div. III—Kidd, C. E.; Kidd, W. J.

Old Testament Criticism—Div. I, Wallace, H. T.; Kidd, C. E.; Macdonnell, L. M.; McConachie, J. C. Div. II—Black, B. S., Brown, G. A., equal; MacInnes, W. H.; Hutcheson, J. H.; Whiting, C. C.; Lindsay, M.; Kidd, D. J. Div. III—

Kennedy, W. A., Strachan, C. C., Millar, J. H., Stevenson, R. McK., equal; Munro, M. F., Bright, A., Ferguson, J., equal; MacDonald, J. M.; McKeracher, D. A.; MacQuarrie, W. J.; Woods, I. H.; Stewart, J. A.; Beveridge, R. W.; Watt, W. J.; Stewart, D. J.

Systematic Theology—Div. I, Macdonnell, Logie; Hutchison, J. H.; Lindsay, M. A. F.; Strachan, C. E., Donnell, J. A., equal; Beckett, S. E.; Wallace, H. T., Caldwell, J. S., equal; Kidd, W. J.; McConachie, J. C., MacInnes, W. H. E., Beveridge, R. W., equal. Div. II—Black, B. S.; Ferguson, J., Miller, J. H., Whiting, C. C., equal; Stewart, J. A.; MacQuarrie, W. J.; Watt, W. J.; Bright, A.; Brown, G. A. Div. III—Woods, I. H., Munro, M. F. equal; Mackinnon, J. D., Cameron, A. E., equal; McKeracher, D. A.; Stevenson, R. McK.; McDonald, J. M.; Kennedy, W.; Kidd, C. E.

O. T. Exegesis—Div. I, McConachie, J. C., MacInnes, W. H., Wallace, H. T., equal; Macdonnell, L., Hutcheson, J. H., equal; Munro, M. F.; Whiting, C. C., Bright, A., equal; Strachan, C. C. Div. II—McKeracher, D. M., Kidd, C. E., equal; Stewart, J. A., Lindsay, M. A., Brown, G. A., equal; Stevenson, R. McK.; Ferguson, J.; Kidd, W. J., McDonald, J. M., equal; MacQuarrie, W. J., Woods, I. H., equal; Beveridge, R. W., Watt, W. J., equal. Div. III—Miller, J. H., Stewart, D. J., equal; Kennedy, W. A., Black, B. S., equal.

N. T. Criticism—Div. I, McConachie, J. C.; Black, B. S.; Hutcheson, J. H.; Wallace, H. T.; MacQuarrie, W. J.; Marshall, D. H.; Brown, G. A.; Beveridge, R. W.; Bright, A.; Donnell, J. A.; Whiting, C. C.; MacInnes, W. H.; Lindsay, M. A. F.; McKeracher, D.; Strachan, C. C.; Munro, M. F.; Watt, W. J. Div. II—McDonald, J. M.; Stewart, J. A.; Miller, J. H.; Macdonnell, L.; Beckett, S. E.; Kennedy, W. A.; Kidd, W. J.; Caldwell, J. S.; Woods, I. H.; Stewart, D. J. Div. III—McKinnon, J. D.; Ferguson, J.

N. T. Exegesis—Div. I, Wallace, H. T.; Whiting, C. C.; Brown, G. A.; Kidd, C. E.; McConachie, J. C.; MacQuarrie, W. J.; Hutcheson, J. H.; Strachan, C. C.; Cameron, A. E. Div. II—Kennedy, W. A.; Stevenson, R. M.; Beveridge, R. W.; Black, B. S.; Beckett, S. E.; Lindsay, M. A.; Miller, J. H.; McDonald, J. M.; Kidd, W. J.; Watt, W. J.; Caldwell, J. S.; Ferguson, J. Div. III—McKeracher, D.; Bright, A.; Stewart, J. A.; Woods, I.; Munro, M. F.; Stewart, D. J.; McKinnon, J. D.

Apologetics—Div. I, Brown, G. A.; Hutcheson, J. H.; Black, B. S.; Donnell, J. A.; MacQuarrie, W. J.; Watt, W. J.; Kidd, C. E.; Ferguson, J.; Lindsay, M A. F.; Cameron, A. E.; Kidd, W. J.; Munro, M. F.; McKeracher, D. A.; Bright, A.; Kennedy, W. A. Div. II—Stevenson, R. M.; Stewart, J. A.;

McKinnon, J. D.; Caldwell, J. S.; Woods, I. H. Div. III—Stewart, D. J.; Miller, J. H.

SUPPLEMENTARY PASS.

N. T. Criticism and Exegesis, 1903-04—Ferguson, J.

Apologetics, 1903-04—MacQuarrie, W. J.

N. T. Theology, 1902-03—Miller, J. H.

O. T. Exegesis, 1903—Hutcheson, J. H.

O. T. Criticism, 1903—Hutcheson, J. H.

O. T. Criticism, 1904—Hutcheson, J. H.; Kidd, W. J.; Ferguson, J.

MEDICAL EXAMINATIONS, APRIL, 1905.

First Year.

Physics—McIntosh, F. B.

Junior Chemistry—Byers, J. C.; Cotnam, I. D.; Milburn, H. H.; Myers, E. T.; Carmichael, S. V.; Morrison, W.; Bow, M. R.; Baker, J. O.; Hambly, W. R.; Connolly, N. W.; Costello, M. C.; Byrne, E. P.; Patterson, C. A.; Day, L. J., and McIntosh, F. B., equal; Stewart, J. A.; Buck, L. L., and Kelly, J. M., equal; Thompson, B. H.; Fee, D. L.

Animal Biology and Junior Physiology—Spence, H. D. L.; Cotnam, I. D.; Connolly, H. A.; Wellwood, T. R.; Bow, M. R.; MacDonald, Arch.; Longmore, H. B.; Byrne, E. P., and Carmichael, S. V., equal; Porter, W. C.; Greaves, G. A.; Morrison, William; Hambly, W. R.; Byers, J. O.; Costello, M. C.; Kelly, J.; Buck, L. L., and Connolly, N. W., equal; Patterson, C. A.; Coulombe, P. O.; Myers, E. T., and Ross, T. R., equal; Baker, J. O.; McIntosh, F. B.; Johnston, A. C.; Beggs, W.; Milburn, H. H.; Mabee, H. C.; Bond, H. E.; Thompson, B. H.; Charbonneau, J. E.; Hurtubise, J. R.

Junior Anatomy—Spence, H. D. L.; Myers, E. T.; Dunlop, H.; Cotnam, I. D.; Wellwood, T. R., and Morrison, W., equal; Baker, J. O.; Carmichael, S. V., and Connolly, H. A., equal; MacDonald, A.; Milburn, H. H.; Costello, M.; Sargent, F. R.; Byers, J. C.; Hambly, W. R.; Couloumbe, P. O.; Patterson, C. A., and Beggs, W., equal; Connolly, N. W., and Longmore, H. B., equal; Bow, M. R.; Ross, T. R.; McIntosh, F. B.; Byrne, E. P.; Thompson, B. H., and Kelly, J. M., equal; Mabee, H. C.; Cornett, W. F.; Buck, L. L.; Bond, H. E.; Hurtubise, J. R.; Duchesne, J. H.

Junior Materia Medica—Longmore, H. B.; Dunlop, H., and Cotnam, I. D., equal; Cornett, W. Fred.; Sargent, F. R.; Myers, E T., and Morrison, W., equal; Connolly, H. A.; Baker, J. O.; Byers, J. C.; Coulombe, P. O., and Milburn, H. H., equal; Spence, H. D. L.; McIntosh, F. B., and MacDonald, Archie, equal; Carmichael, S. V.; Claxton, W. A., and Bow, Mac. R., equal; Connolly, N. W.; Kelly, J. M., and Patterson, C. A., equal; Begg, W. M.; Ross, T. R.; Hambly, W. R., and Mabee, H. C., equal; Buck, L. L., and Hurtubise, J. R., equal; Costello, M. C.; Wellwood, Thomas R., and Thompson, B. H., equal; Byrne, E. P.; Allaire, Joseph W.; Little, Thomas; Charbonneau, J. E.; Thompson, A. Y.; Lapierre, J. M.

Second Year.

Senior Physiology—Quigley, J. P.; McNamara, J. P.; Curphey, A. G.; McCallum, S.; Carto, G. E.; Wightman, R.; Laidlaw,

C. A., and Casselman, S. B., equal; Johnston, John, and Paul, R. D., equal; Walker, M. J. O.; Burke, M. L.; Bowen, H. M., Sullivan, H. J., and Trousdale, F. H., equal; McCormick, A. M.; McDermott, John F.; Asselstine, B.; Yule, W. L.; Brown, J. E., and Greaves, G. A., equal; Keeley, F. J.; Story, G. E.; McLellan, D.; Kingsley, F., and Spankie, A. T., equal; Johnson, A. C.; McDonald, A., Duchesne, J. H., Geddes, W. J., Nicholls, R. F., Cliff, G. F., Gaudet, E. A., and Lavell, W. H., equal.

Histology—Quigley, J. P.; Carto, G. E.; Laidlaw, C.; Longmore, H. B.; Trousdale, F. H., and Paul, R. D., equal; Asselstine, B.; Wightman, R.; Curphey, A. G.; Casselman, S. B.; McLellan, D.; Johnston, A. C.; Keeley, F. J.; Greaves, G. A.; Brown, J. E., Bowen, H. M., and Nicholls, R. F., equal; Story, G. E.; Burke, M. L., and Yule, W. L., equal; McDonald, A.; Walker, M. J.; Sullivan, H. J.; McCormick, A. M.; Ford, W. H.; Spankie, A. T.; Geddes, W. J., Mills, R., and Bond, H. E., equal.

Senior Anatomy—Wightman, R.; Paul, R. D.; McCallum, S., and Trousdale, F. H., equal; Carto, G. E., McNamara, J. P., and Yule, W. Lorne, equal; Losee, J. R., and Quigley, J. P., equal; Asselstine, B.; Johnston, J.; Curphey, A. G.; Graham, C. W.; Spankie, A. T.; Casselman, S.; Keeley, F. J.; Burke, M. L.; Story, G., and Walker, M. J. O., equal; McCormick, A. M.; Brown, J. E., and Greaves, George, equal; Laidlaw, C.; Bowen, H. M., and McDermott, J. F., equal; Johnston, A. C.; Sullivan, J. Herbert; Nicholls, R. F.; Bennett, H. J.

Senior Chemistry—Wellwood, T. R.; Saunders, T. F.; Johnston, John; Paul, R. D.; Quigley, J. P., and Twitchell, E. G. C., equal; Porter, W. C.; Bowen, H. M.; Burke, M. L.; Carto, G. E.; Trousdale, F. H.; Day, L. J.; Yule, W. L.; McCormick, A. M., Spankie, A. T., and A. G. Curphey, equal; Keeley, F. J.; Asselstine, B.; Wightman, R.; Sullivan, J. H.; Corrigan, J. A.; Walker, M. J. O.; Casselman, S. B.; Greaves, G. A.; Brown, J. E.; McDonald, Angus; Stewart, J. A.; Johnston, A. C., and Nicholls, R. F., equal.

Practical Chemistry—McNamara, J. P.; Yule, W. L.; Longmore, H. B.; Trousdale, F. H.; Shannon, S.; Greaves, G. A.; Casselman, S. B., and Spankie, A. T., equal; Carto, G. E.; Bowen, H. M.; Laidlaw, C., and Wightman, R., equal; McDonald, A.; Paul, R. D.; Quigley, J. P., and Sullivan, J. H., equal; Spence, H. D. L.; Asselstine, B.; Curphey, A. G., Johnston, A. C., and McCormick, A. M., equal; Keeley, F. J., Bond, H. E., Johnston, J., Nicholls, R. F., and Walker, M. J. O., equal; Burke, M. L.; Porter, W. C.; McIntosh, P. A.; Twitchell, E. G.; Duchesne, J. H.; Ford, W. H.; Charbonneau, J.; Corrigan, J. A.

Pharmacy and Pharmacology—Trousdale, F. H.; Burke, M. L.; Quigley, J. P.; Laidlaw, C.; Graham, C. W., Wightman, R., and Losee, J. R., equal; Paul, R. D.; Spankie, A. T., McDermott, J. F., and McCallum, S., equal; Carto, George E.; Walker, M. J. O.; Bowen, H. M.; Randall, George, and Johnston, J., equal; Brown, J. E.; Sullivan, H. J.; Yule, W. L., Spence, H. D. L., and Greaves, G., equal; Curphey, A. G.; Casselman, S. B.; Saunders, T. F.; McCormick, A. M., and Story, G. E., equal; Ford, W. H.; Asselstine, B.; Keeley, F. J.; Nicholls, F. R., and Mills, R., equal; Donevan, F. G.; Johnston, A. C., Duchesne, J. H., McDonald, A., and Gavin, W. F., equal.

Third Year.

Junior Obstetrics and Pediatrics—Bell, A. M.; Bolton, E., and Stewart, J. R., equal; McCallum, S.; Cochrane, H., and Johnston, John, equal; Sutherland, E.; Patterson, W. E.; Dingwall, D. G.; Baker, A. E., Patterson, W. R., and Playfair, L. L., equal; Lowe, F. E., Redden, H. O., and Reid, James, equal; Brander, J. F., and McDonald, D. J., equal; Stuart, G. M., O'Connor, F. J., and McKenley, A. G., equal; Spankie, W. E., and Saunders, T. F., equal; Wade, J. J.; Sutherland, B., Snyder, J. B., and Taugher, W. J., equal; Publow, C. A.; Craig, H. G.; Shannon, S. S.; Lawler, C. A., and Doyle, J. F., equal; Cliff, G. F.; Longmore, H. B.; Templeton, C. P., and Young, D. M., equal; McLellan, D., and Smith, S. H., equal; Nicolle, F. R., and Rigney, M. G., equal; McCormick, J. P., and Palmer, W. M. R., equal; Cockburn, G. L.; Ballantyne, W. H.; Thompson, A. Y.; Gavin, W. F., Moore, H. E., Herald, J. G., and Twitchell, E. G., equal; Paterson, R. K.

Junior Practice of Medicine—Bell, A. M., and Patterson, W. R., equal; Paterson, R. K., and Playfair, W., equal; Cochrane, H., Stewart, J. R., and Bolton, E., equal; Wade, J. J.; Redden, H. O.; Patterson, W. E.; Saunders, T. F.; Stuart, G. M.; O'Connor, F. J., Graham, C. W., McKenley, A. G., Publow, C. A., and McCormick, J. P., equal; Nicolle, F. R., and McLellan, D., equal; Spankie, W. E., McCallum, S., Baker, A. E., Sutherland, B., and Johnston, J., equal; Sutherland, E., Shannon, S., Lowe, F. E., and Reid, J., equal; Taugher, W., and Rigney, M. G., equal; Doyle, J. F., and Craig, H. G., equal; Dingwall, D. G.; Cockburn, G. L.; Cliff, G. F.; Moore, H. E., and Lawler, C. A., equal; Young, D. M., Templeton, C. P., Snyder, J. B., Brander, J. F., and Gavin, W. F., equal; McDonald, D. J.; Herald, J. G.; Mikaera, W. R., and Stewart, J. A., equal; Palmer, W. M.; Smith, S. H.

Junior Surgery—Baker, A. E., and Patterson, W. R., equal; Bolton, E.; Playfair, L. L.; Sutherland, E., Publow, C. A., and

Lowe, F. E., equal; McKenley, A. G.; Johnston, J., McCormick, J. P., and O'Connor, F. J., equal; McCallum, S.; Patterson, R. K., Sutherland, B., and Dingwall, D. G., equal; Bell, A. M.; Smith, S. H., Taugher, W., Redden, H. O., McDonald, D. J., and McLellan, D., equal; Gaudet, A. E., and Gavin, W. F., equal; Gordon, G. D., Reid, J., Snyder, J. B., and Stuart, G. M., equal; Wade, J. J.; Stewart, J. R., and Brander, J. F., equal; Smith, B. A.; Patterson, W. E., and Graham, C. W., equal; Lawler, C. A., Shannon, S., Cochrane, H., and Young, D. M., equal; Cockburn, G. L., and Randall, G. R., equal; Spankie, W. E.; Hourigan, J. M., Saunders, T. F., and Thompson, A. Y., equal; Craig, H. G., and Nicolle, F., equal; Cliff, G. F., Templeton, C. P., and Doyle, J. F., qqual; Twitchell, E. G., and Tennent, R. W., equal; Palmer, W. R.; Rigney, M. G., and Moore, H. E., equal; Herald, J. G.; Mikaera, W.; McFadyen, J.

Pathology—Bolton, E.; Baker, A. E.; Stewart, J. R., and Patterson, W. R., equal; Reid, James; Playfair, L. L., and Lawler, C. A., equal; Paterson, R. K.; Patterson, W. E.; Snyder, J. B.; O'Connor, F. J., and Sutherland, E., equal; McDonald, D. J., and McKenley, A. G., equal; Publow, C. A., and McCormick, J. P., equal; Lowe, F. E., and Wade, J. J., equal; Gavin, W. F., and Longmore, H. B., equal; Sutherland, B.; Spankie, W. E., and Taugher, W. J., equal; Cochrane, H.; Stuart, G. M., Bell, A. M., and Dingwall, D. G., equal; Saunders, T. F., Redden, H. O., and Brander, J. F., equal; Smith, S. H.; Nicolle, F. R., and Craig, H. G., equal; Austin, C. J., and Tennent, R. W., equal; Templeton, C. P.; Doyle, J. F.; Cockburn, G. L., Twitchell, E. G., Rigney, M. G., and Shannon, S., equal.

Sanitary Science—Publow, C. A.; Baker, A. E.; Bolton, E., Patterson, W. R., and Stewart, J. R., equal; McCallum, S.; Playfair, L. L., Johnston, J., equal; Spence, H. D. L.; O'Connor, F. J.; Reid, J.; Dwyer, J. G.; Gavin, W. F.; Cochrane, H., and Taugher, W., equal; Longmore, H. B.; Laidlaw, C. A.; Bell, A. M., Wade, J. J., and McLellan, D., equal; Stuart, G. M., Lawler, C. A., and Spankie, W. E., equal; Lowe, F. E.; Patterson, W. E., and Smith, S. H., equal; Sutherland, B.; Cockburn, G. L., Dingwall, D. G., Gaudet, E. A., and McKenley, A. G., equal; McCormick, J. P.; Snyder, J. B.; Graham, C. W., Randall, G., Saunders, T. F., equal; McDonald, D. J., and Dudley, W. H., equal; Cliff, G. F.; Redden, H. O.; Thompson, A. Y., and Craig, H. G., equal; Palmer, W. M., and Rigney, M. G., equal; Doyle, J. F., Twitchell, E. G., Templeton, C. P., and Stewart, J. A., equal; Turnbull, J.; McFadyen, J. Y., and Brander, J. F., equal; Herald, J. G.

Jurisprudence and Toxicology—Playfair, L. L.; Baker, A. E.; Bolton, E.; Reid, J., and Bell, A. M., equal; Redden, H. O., McDonald, D. J., and Dwyer, J. G., equal; McCallum, S.; McCormick, J. P.; Stewart, J. R.; Gavin, W. F.; Laidlaw, C.; Spankie, W. E.; Sargent, F. R.; Lowe, F. E., Patterson, W. R., and Wade, J. J. equal; O'Connor, F. J.; Saunders, T. F., and Lawler, C. A., equal; McKenley, A. G.; Patterson, W. E.; McLellan, D., and Cockburn, G. L., equal; Publow, C. A., and Cochrane, H., equal; Palmer, W. M. R.; Snyder, J. B.; Longmore, H. B.; Taugher, W.; Sutherland, B., and Shannon, S., equal; Smith, S. H.; Stuart, G. M.; Young, D. M.; Story, G. E.; Twitchell, E. G.; Cliff, G. F.; Craig, H. G.; Brander, J. F.; Rigney, M. G.; Herald, J. G.

Junior Applied Anatomy—Bolton, E.; Spankie, W. E.; Dwyer, J. G.; Sutherland, E.; Warren, F. R.; Patterson, W. R., O'Connor, F. J., and Templeton, C. P., equal; Bell, A. M., and Baker, A. E., equal; Patterson, W. E.; Snyder, J. B.; Playfair, L. L.; Taugher, W., and Dingwall, D. G., equal; McDonald, D. J.; Thompson, A. Y.; Lawler, C., and Johnston, J., equal; Paterson, R. K.; Cochrane, H., Reid, James, and Stewart, J. R., equal; McCallum, S., Mikaera, W. R., and Graham, C. W., equal; Publow, C. A.; McCormick, J. P.; McKenley, A. G.; Stuart, G. M.; Sutherland, B.; Herald, J. G.; Saunders, T. F.; Craig, H. G.; Doyle, J. F.; Brander, J. F.; Gavin, W. F.; Wade, J. J.; Redden, H. O.; Cliff, G. F.; McLellan, D.; Lowe, F. E.; Smith, S. H.; Twitchell, E. G.; Maclachlan, A. J.; Shannon, S.; Cockburn, G. L.; Nicolle, F. R.; Palmer, W. M.

Fourth Year.

Senior Practice of Medicine—Williamson, H. J., Spooner, A. C., Lesses, M., equal; Sparks, J. F.; McIntosh, P. A.; Smith, B. A.; Hogan, J. T., Bennett, H. J., equal; Robb, W. M.; Grimshaw, M. E.; Turnbull, J., Consitt, E. C., Macgillivray, T. D., Gaudet, E. A., equal; Sproule, E. W., Warren, J. W., Halladay, R. W., equal, Locke, M., MacKinnon, D. L., Ferguson, J. Y., MacMillan, A. D., equal; Mahood, A. E., Keyes, S. J., Reid, G. R., equal; Wagar, C. M.; Randall, G. R.; Robb, J. J.; Dudley, W. H.; Hunt, A. H.; Haycock, G.; Dwyer, J. G.; Ballantyne, W. G.; Reynolds, M. E.; Warren, F. R. W.; Maclachlan, A. J.; Hourigan, J. M.; Code, J. H.; Smith, W. A.; Kingsley, F.; Chant, J.; Moxley, C. R.; Gordon, G. D.; Girvin, A. W.; Geddes, W. J.; Tennent, R. W.; Corrigan, J. A.

Clinical Medicine—Spooner, A. C., Sparks, J. F., Williamson, H. J., Hunt, A. H., Halladay, R. W., Grimshaw, M. E., equal; Macmillan, A. D., MacKinnon, D. L., Sproule, E. W., Girvin, A. W., Locke, M., equal; Smith, B. A.; Macgillivray,

T. D., Lesses, M., Maclachlan, A. J., Warren, F. R. W., Dwyer, J. G., Robb, W. M., Robb, J. J., Dudley, W. H., Chant, J., equal; McIntosh, P. A.; Warren, J. W.; Bennett, H. J.; Reynolds, M. E.; Hogan, J. T.; Ballantyne, W. N.; Code, J. H.; Tennent, R. W.; Reid, G. R.; Gaudet, E. A.; Mahood, A. E.; Wagar, C. M.; Turnbull, J.; Consitt, E. C.; Hourigan, J. M.; Randall, G.; Haycock, G. W. G.; Moxley, C. R.; Stewart, J. A.; Smith, W. A.; Geddes, W. J.; Ferguson, J. Y.

Senior Surgery—Spooner, A. C., Williamson, H. J., equal; Dwyer, J. G., Lesses, M., equal; Robb, J. J., Sparks, J. F., equal; McIntosh, P. A.; Locke, M., Grimshaw, M. E., equal; Smith, B. A.; Hogan, J. T.; Ferguson, J. Y.; Consitt, E. C.; Macgillivray, T. D.; Reynolds, M.; Dudley, W. H.; Halladay, R. W.; Robb, W. M.; Code, J. H.; Moxley, C. R.; MacMillan, A. D.; Ballantyne, W. H.; Sproule, E. W.; Girvin, A. W.; MacKinnon, D. L.; Warren, F. R. W.; Turnbull, J.; Keyes, S. J.; Smith, W. A.; Hunt, A. H.; Warren, J. W.; Chant, J.; Bennett, H. J.; Hourigan, J. M.; Randall, G.; Wagar, C. M.; Gaudet, E. A.; Tennent, R. W.; Gordon, G. D.; Maclachlan, A. J.; Reid, G. R.; Lavell, W. H.; Mahood, A. E.; Corrigan, J. A.

Clinical Surgery—Lesses, M.; Sparks, J. F.; Williamson, H. J.; Spooner, A. C.; Hogan, J. T.; Girvin, A. W., Halladay, R. W., Grimshaw, M. E., Locke, M., Mahood, A E., Macgillivray, T. D., equal; Code, J. H., Robb, W. M., Dudley, W. H., Sproule, E. W., equal; Warren, F. R. W.; Dwyer, J. G.; Bennett, H. J.; Warren, J. W.; Robb, J. J.; Chant, J.; Ferguson, J. Y.; Moxley, C. R.; Smith, B. A.; Reynolds, M.; Smith, W. A.; Wagar, C. M.; MacMillan, A. D.; Turnbull, J.; Reid, G. R.; Gaudet, E. A.; Tennent, R. W.; Consitt, E. C.; Hunt, A. H.; MacKinnon, D L.; Randall, G. R.; Ballantyne, W. H.; Keyes, S. J.; Hourigan, J. M.; McIntosh, P. A.; Maclachlan, A. J.; Lavell, W. H.

Senior Obstetrics and Gynaecology—Lesses, M.; Hogan, J. T.; Halladay, R. W., Reynolds, M., McIntosh, P. A., equal; Dwyer, J. G.; Smith, B. A., Sparks, J. F., Williamson, H. J., equal; Spooner, A. C., Consitt, E. C., Grimshaw, M. E., Randall, G. R., Macgillivray, T. D., Robb, J. J., equal; Chant, J.; Hunt, A. H.; Sproule, E. W.; Tennent, R. W.; Locke, M.; Ferguson, J. Y.; Gordon, G. D.; Mahood, A. E.; Gaudet, E. A.; Warren, F. R. W.; MacKinnon, D. L.; MacMillan, A. D.; Bennett, H. J.; Hourigan, J. M.; Warren, J. W.; Code, J. H.; Robb, W. M.; Turnbull, J.; Smith, W. A.; Maclachlan, A. J.; Reid, G. R.; Moxley, C. R.; Girvin, A. W.; Dudley, W. H.; Wagar, C. M.

Senior Applied Anatomy—Spooner, A. C.; Lesses, M.; Dwyer, J. G.; Hogan, J. T.; Williamson, H. J.; Sparks, J. F.; Reynolds, M. E.; Moxley, C. R.; Robb, J. J.; Dudley, W. H.; Mahood, A. E., and Locke, M., equal; Warren, F. R., and Grimshaw, M. E., equal; Smith, W. A., Warren, J. W., Halladay, R. W., Smith, B. A., Wagar, C. M., and McIntosh, P. A., equal; MacKinnon, D. L., and Sproule, E. W., equal; Macgillivray, T. D.; Hunt, A. H.; Gordon, G. D.; Consitt, E. C.; Turnbull, J.; Randall, G. R.; Girvin, A. W.; Code, J. H.; Robb, W. M.; Hourigan, J. M.; Keyes, S. J.; Chant, Joseph; Bennett, H. J.; Reid, G. R.; Maclachlan, A. J.; Gaudet, E. A.; Tennent, R. W.; Ferguson, J. Y.; MacMillan, A. D.

Pathology—Lesses, M.; Hogan, J. T.; Robb, J. J.; Williamson, H. J.; Spooner, A. C., Reynolds, M., and Sparks, J. F., equal; Halladay, R. W.; Grimshaw, M. E.; Locke. M.; Smith, B. A., and McIntosh, P. A., equal; Macgillivray, T. D., and MacKinnon, D. L., equalJ Robb, W. M., Sproule, E. W., Dwyer, J. G., and Bennett, H. J., equal; Wagar, C. M.; Warren, F. R. W.; Ferguson, J. Y.; Consitt, E. C.; Hunt, A. H.; Hourigan, J. M.; Girvin, A. W.; Moxley, C. R.; Smith, W. A.; Mahood, A. E.; Code, J. H.; Keyes, S. J.; Chant, Jos.; Reid, G. R.; Maclachlan, A. J.; Randall, G. R.; Dudley, W. H.; Turnbull, J.; Gordon, G. D.; MacMillan, A. D.; Gaudet, E. A.; Ballantyne, W. H.; Haycock, G.; Warren, J. W.; Tennent, R. W.

Bacteriology—Gordon, G. D.; Bennett, H. J.; Stewart, J.; Rigney, M. G.

Eye, Ear, Nose and Throat—Lesses, M.; Spooner, A. C.; Sparks, J. F., and Williamson, H. J., equal; Hogan, J. T.; Locke, M.; Dwyer, J. G., Grimshaw, M. E., and Smith, B. A., equal; McIntosh, P. A.; Chant, J.; Smith, W. A.; Reynolds, M., and Warren, J. W., equal; Ferguson, J. Y., Consitt, E. C., Robb, J. J., and MacKinnon, D. L., equal; Warren, F. R. W.; Macgillivray, T. D., and Robb, W. M., equal; Moxley, C. R.; Ballantyne, W. H.; Gordon, G. D.; Keyes, S. J.; Mahood, A. E.; Gaudet, E. A.; Sproule, E. W.; Code, J. H.; Girvin, A. W.; Wagar, C. M.; MacMillan, A. D.; Halladay, R. W.; Dudley, W. H.; Reid, G. R.; Geddes, W. J.; Hourigan, J. M.; Tennent, R. W.; Bennett, H. J.; Turnbull, J.; Hunt, A. H.; Corrigan, J. A.; Randall, G. R.

LIST OF STUDENTS.

SESSION 1904-1905.

IN ARTS.

NAME.	Year of Attendance.	Summer Residence.	Where Educated.
Aksim, E. F....	1	Listowel.....	Russia and Germany.
Alford, Ethel F.....	1	Brockville...	Athens High School.
Amoss, Harold E...	4	Aylmer West.....	Aylmer, C.I.
Anderson, Jno. A...	2	Craigmont..... ...	Albert C.I., Belleville.
Anderson, T. H. P.	2	Chisholm....	Aurora High School.
Anglin, Jennie M...	3	Kingston,...	Kingston Coll. I.
Anglin, Richard W.	1	Cataraqui...	Cork Coll. I.
Anglin, S. M.....	4	Battersea...	Albert C.I., Belleville.
Anning, Norman H.	4	Oxmead P.O., Ont.	Meaford H. S.
Ap'John, F. J.....	1	Rat Portage.....	Rat Portage, H. S.
Ashman, G. H.....	2	Ottawa, Ont.....	Weston and Carleton Pl. H. S.
Asselstine, Oliver..	3	Wilton, Ont.....	Napanee C. I.
Atwater, H. E.....	2	Baddeck, N. S.....	Baddeck H. S.
Austin, Bessie.....	3	Waterford.....	Waterford H. S.
Baird, A. W.....	3	Brockville.....	Brockville C. I.
Bancroft, A. C.....	2	Vankleek Hill.....	Vankleek Hill C. I.
Beecroft, W. A.....	2	Woodville, Ont.....	Lindsay C. I.
Belfrey, Effie.....	2	Waterdown.....	Owen Sound C. I.
Bell, Fred C.....	4	Winnipeg.....	Manitoba Coll.I., Win.
Bennett, W. P.....	1	L'Original, Ont.....	Kingston C. I.
Berney, Laura J...	4	380 Alfred St. City.	Athens H. S.
Bertram, Jean K...	2	Dundas.....	Dundas H. S.
Beveridge, R. W...	5	Port Elmsley.....	Smith's Falls H. S.
Bigelow, G. H.....	2	Gravel Hill.....	Cornwall H. S.
Bigelow, Gert'de R.	2	Aultsville.....	Cornwall H. S.
Black, N. F.....	3	Springfield.....	Uxbridge H. S.
Bland, Chas.....	2	Pembroke.....	Pembroke H. S.
Bluett, C.....	2	Crediton.....	Forest H. S.
Boak, A. E.....	3	Kingston....	Kingston C. I.
Boland, W. A.....	5	Killaloe Station....	Renfrew H. S.
Bongard, Edna.....	3	Picton.....	Picton H. S.
Bothwell, A. M.....	4	Perth.....	Perth C. I.
Bowen, N. L.....	2	Kingston.....	Kingston C. I.
Branion, S. J. A....	3	Wolseley, Assa.....	St. Mary's C. I.
Brennan, J. B.....	2	Toronto.....	Toronto C. I.
Bright, Alfred.....	4	Montreal...	Montreal H. S.

NAME.	Year of Attendance.	Summer Residence.	Where Educated.
Brown, Duncan	2	Kingston	Kingston C. I.
Brown, H. W.	3	Berlin	Harriston, H. S.
Brown, P. W.	6	Sydenham	Smith's Falls H. S.
Brownlee, W. F.	4	McDonald's Cor'rs.	Perth C. I.
Bryson, Isabel	6	Kingsmere, Que.	Ottawa Ladies' Col.
Buchanan, J. A.	2	Morrisburg	Parkhill H. S.
Buchanan, J. D.	4	Vancouver	Brantford C. I.
Burchill, A. M.	2	Bolton	Hamilton C. I.
Burns, C. J.	2	Cannington	Lindsay C. I.
Burns, Olive M.	3	Kingston	Kingston C. I.
Cadenhead, A.F.G.	1	Pickering	Pickering Coll.
Calder, Frank	1	Westmount, P.Q.	Bristol Gram. School.
Calhoun, Kathleen	2	Ottawa	Ottawa C. Institute.
Cameron, A. G.	3	Montague, P.E.I.	P.W. Coll, Charlottetown, P.E.I.
Cameron, D. R.	4	Lancaster	Alexandria H. S.
Cameron, J. S.	8	Ingersoll	
Campbell, A. L.	4	Fergus, Ont.	
Campbell, N. W.	2	Durham	
Campbell, R. H.	1	Summerside, P.E.I.	Prince of Wales Coll.
Canfield, F. O.	1	New Westminster, B.C.	
Carmichael, Duncan	1	Unionville	Markham H. S.
Carruthers, W. T.	3	Brockville	Brockville C. I.
Carson, Fred C.	1	Kingston	Kingston C. I.
Carson, Leta	1	Kingston	Kingston C. I.
Cathro, Eliz. D.	4	Lindsay	Lindsay C. I.
Caverley, D. C.	1	Minto, Ont.	Stirling H. S.
Chambers, L. P.	5	Bardezag, Turkey.	Robert College, Constantinople.
Chandler, Pearl	2	Norwood	Norwood, H. S.
Chapman. W. F.	3	Toronto	
Charlesworth, J.W.	6	Guelph	Private Tuition.
Chatterton, Anna	1	Kingston	Kingston C. I.
Chisholm, W. A.	1	Oakville	
Chown, Daisy G.	3	Kingston	Kingston C. I.
Clancy, G. S.	2	Newburgh	Newburgh H. S.
Clark, H. J.	4	Belleville	Belleville H. S.
Clarke, H. M.	1	Kingston	Kingston C. I.
Clarke, Hugh M.	3	Almonte	Almonte. H. S.
Clarke, T. E.	3	Ottawa	Harbord St. C. I. Toronto.
Claxton, W. A.	3	Verona	Sydenham H. S.

NAME.	Year of Attendance.	Summer Residence.	Where Educated.
Clement, Jas. W.	1	Kelowna, B.C.	
Clifford, Margaret.	2	Conroy	Stratford C. I.
Closs, F. D.	6	Lucan, Ont.	Aylmer C. I.
Clugston, J. F.	2	Epping	Meaford H. S.
Code, S. W. A.	3	Kingston	Carleton Place, H. S.
Coglon, R. E.	1	Wilton	
Compton, Edith.	1	Kingston	Kingston C. I.
Connor, Grace.	5	Kingston	Kingston C. I.
Coombes, J. E.	2	Hanover	Goderich C. I.
Coon, Harry J.	3	Belleville	Belleville H. S.
Cooper, A. B.	4	Chatsworth	
Cornell, M. L.	2	Carleton Place	Carl. Place H. S.
Cornett, A. Dow.	2	Kingston	Kingston C. I.
Cowles, John P.	1	Ivy	Barrie C. I.
Cowling, T.	1	Toronto	Jarvis Coll. I. and McMaster Univ.
Craig, Vernon	1	Cataraqui	Kingston C. I.
Cram, W. S.	3	Carleton Place	Carleton Place H. S.
Crawford, C. M.	3	Kingston	Kingston C. I.
Dadson, Helena	4	Kingston	St. Thomas C. I.
Daley, J. C.	1	Kingston	Regiopolis Coll.
Daley, T. V.	2	Kingston.	Private Tutor.
Darroch, W. F.	6	Brantford	Harriston, H. S.
Davidson, E. M.	1	Kingston	Kingston C. I.
De Forneri, Kate	1	Kingston	Merrickville, H. S.
Dendis, E. M.	2	Ottawa	Woodstock C. I.
Denny, J. D.	3	Ottawa	Peterboro C. I.
Deutschmann, F.W.	4	Orillia	Harriston H. S.
Dewey, W. F.	1	Lakeport	Colborne, H. S.
Dickson, Zilpha H.	3	Woodstock	Woodstock C. I.
Dingwall, R.	2	Cornwall	Cornwall H. S.
Dingwall, W. A.	1	Cornwall	" "
Dixon, B.	1	Montreal	Berthier Gram'r Sch.
Donald Helen	3	Belleville	Belleville H. S.
Donald Jean	2	Belleville	" "
Donevan, F. J.	4	Gananoque	Gananoque H. S.
Doolittle, Jasper.	1	Brandon, Man.	
Down, G. W.	4	Erin, Ont.	Charing National.
Downey, R. F.	1	Port Perry	Weston H. S., Toronto J'c. C. I.
Drewry, F.	1	Stirling	Stirling H. S.
Drysdale, F. W.	2	Lanark	Congregational Coll., Montreal.

NAME.	Year of Attendance.	Summer Resieence,	Where Educated.
Dunham, C. S.....	2	Frankville.....	Athens H. S.
Dunlop, F. M.....	3	Kingston...	Kingston C. I.
Dunlop, H.....	4	Kingston.....	" "
Dwyer, W. O.....	3	Kingston...	" "
Easson, R. C..... ...	2	Stratford...	Stratford C. I.
Eby, D. M.....	1	Kingston.....	Kingston C. I.
Eby, O. S.....	2	Philipsburg West...	Stratford C. I.
Edwards, J. J.....	3	Burritt's Rapids....	Lanark H. S.
Elder, Hosie..... ...	5	Elder's Mills.....	Weston H. S.
Elliott, R. L.....	2	Orillia.....	Campbellford.
Ellis, D. S.....	3	Kingston.....	Kingston C. I.
Ellis, Mina A.... ...	2	Pakenham, Ont.....	Almonte H. S.
Ellis, Richard J....	2	Ellisville.....	Athens H. S.
English, Ralph G..	1	Woodstock, Vt., U. S.A.....	Woodstock H. S.
Ettinger, J. G.....	5	Kingston.....	Listowel H. S.
Evans, A. R.....	5	Louisville, Ky.....	Omemee Ont.
Evans, J. J.....	4	Toronto.....	Walkerton H. S.
Everts, H. A.....	3	Lyn.....	Brockville C. I.
Fairlie, Jas..... ...	4	Kingston.....	Brockville, C. I.
Fallis, L. K.....	1	Toronto.....	Port Perry.
Fargey, Agnes M...	1	West Huntingdon.	Stirling H. S.
Farnham, M. M....	3	Prescott.....	Prescott H. S.
Feasby, W. J.....	3	Agincourt.....	Harbord St. Coll. I., Toronto.
Ferguson, El'nor K.	1	Ottawa.....	Ontario Ladies'Coll., Whitby.
Ferguson, James D.	2	Carleton Place.....	Carlton Place Coll. Institute.
Ferguson, J. J.....	2	Fergus...	Galt Coll. Institute.
Ferguson, William.	3	McLaren's Depot.	Perth C. I.
Findlay, Jessie A...	1	Lansdowne.....	Palmyra H. S.
Finlayson, D. K.....	4	Grand River, N. S.	Grand River H. S.
Finn, Jos. P.....	4	Plantagnet.....	Chateam C. I.
Fleming, W. S.....	4	Franktown.....	Smith's Falls H. S.
Flynn, T. A.....	4	Morrisburg...	Morrisburg C. I.
Fockler, Chas. E...	2	Stouffville.....	Chatham H. S.
Foik, H. J.....	4	Kingston...	Stratford C. I.
Fokes, A. F.....	2	Kingston...	Kingston C. I.
Foley, D. E.....	1	Westport.....	
Forrester, J. W.....	2	Balderson, Ont.....	Athens H. S.
Foster, Beatrice L	2	Smith's Falls.....	Smith's Falls H. S.

NAME.	Year of Attendance.	Summer Residence.	Where Educated.
Fraser, D. J.	2	Whitby	Whitby C. I.
Fraser, W. P.	4	Pictou, N.S.	Pictou Acadamy.
Froats, J.	3	Finch	Morrisburg C. I.
Fuller, E. L.	2	Erin	London C. I.
Galloway, J. E. B.	2	Kingston	Kingston C. I.
Gardiner, J. N.	1	Kingston	" "
Gibson, Ethel B.	6	Kingston	" "
Gibson, G. H. D.	3	Ottawa	Kemptville.
Gibson, M. J.	1	Kingston	Kingston C. I.
Gilchrist, W. A.	1	Glamis, Ont.	Kincardine H. S.
Gilmour, A.	3	Grennock	Walkerton H. S.
Goodfellow, T. J.	2	Parham	Sydenham H. S.
Goodwin, W. M.	1	Kingston	Kingston C. I.
Gordon, J. B.	1	Kingston	" "
Gordon, Wilhelmina	4	Kingston	Dalhousie, Halifax, N.S.
Graham, C. R.	1	Arnprior	Arnprior H. S.
Grass, Margaret F.	4	Kingston	Kingston C. I.
Gravelle, Francis W.	1	Portsmouth	Regiopolis College.
Greene, Edith M.	2	Brockville	Brockville C. I.
Grove, W. G.	4	Ringwood	Markham H. S.
Grover, J. I.	2	Saskatoon	Trinity Coll. School, Port Hope.
Guy, R. D.	4	Camden East	Newburgh H. S.
Hadden, A. T.	4	Toronto	Markham H. S.
Hall, T. F.	5	Cobourg	Cobourg, H. S.
Hallett, W. J.	3	Barrie	Self Taught.
Hamilton, J. R.	1	Winterbourne	Berlin H. S.
Hamilton, W. J.	4	Picton	Cobourg H. S.
Hammond, J. E.	2	Toronto	Meaford H. S.
Hanna E.	1	Laurier, Ont.	Harbord St. C. I., Toronto.
Harkness, Mary D.	3	Metcalfe	Kemptville.
Harpell, T. W.	5	Inverary	Inverary H. S.
Harrison, F. W.	4	Beaver R'pds, Man.	Richmond H. S.
Haughton, C.	2	Russeltown	Kemptville.
Hawes, Ida	4	Pasadena, Cal.	St. Thomas C. I.
Hay, W. M.	4	Paisley	Paisley H. S.
Haycock, Marg't G.	1	Kingston	Coll. Inst., Kingston.
Hendry, Annie S.	6	Hamilton	Hamilton.
Hewton, E. Gert'de.	6	Kingston	Kingston C. I.
Heywood, C'rline G.	1	Montreal	Girl's School, N.Y.

NAME.	Year of Attendance.	Summer Residence.	Where Educated.
Hill, James	3	Harrington West	St. Mary's C. I.
Hiscock, May B.	2	Kingston	Kingston C. I.
Hiscock Rita	5	Kingston	Kingston C. I.
Hoeven, Mathilda.	1	Berlin	High School.
Hofferd, G. W.	3	Milverton	Owen Sound C. I.
Holmes, Maggie	1	Winchester	Morrisburg Coll. I.
Hooper, C. H.	1	Hamilton	Ont. Public Schools.
Houstan, J. A.	1	Belleville	Albert Coll. I., Bel'ville.
Howard, L.	1	Standfordville	West Virginia Univer.
Hudson, C. K.	2	Benton, Carleton Co., N.B.	St. John's Meth. Col.
Huff, J. S.	2	Meaford	Meaford H. S.
Hughes, Ada E.	3	Kingston	Kingston C. I.
Hughes, R. A.	3	Kingston	" "
Hunter, G. H.	1	Clayton, N.Y.	" "
Hutchison, R. H.	1	Bath P.O.	Hamilton C. I.
Ide W.	4	Ottawa	Centre for pupil t'chrs
Jackson, G. W.	1	Kingston	Kingston C. I.
Jackson, R. C.	1	Arrowhead, B.C.	Pictou Acadamy, N.S.
Jewitt, Thos. J.	3	Campbell's Cross	
Jones, F. A.	5	Ottawa	Woodstock & Brantford Coll. Inst.
Jordan, D.	2	Kingston	Kingston C. I.
Joyce, C. E.	1	Lowville	Oakville & Hamilton.
Kaine, J. M.	1	Sault Ste. Marie	
Karr, W. J.	5	Sarnia	Forest H. S.
Kennedy, F. C.	3	Westport	Athens H. S.
Kennedy, W. A.	5	Stratford	Stratford C. I.
Kennedy, W. W.	2	Westport	Athens H. S.
Kerr, T. R.	4	Portsmouth	Kingston C. I.
Key, J. A.	3	Dalston	Barrie C. I.
Kidd, Angus	5	Prospect	Carleton Place H. S.
Kidd, G. E.	3	Prospect	Kemptville H. S.
King, G. A.	2	Crambrook, B.C.	Walkerton H. S.
King, H. B.	2	Vancouver, B.C.	Walkerton H. S.
Kingston, H. R.	2	Picton	Picton H. S.
Kirkpatrick, W. H.	1	Nobleton, Ont.	Bradford.
Knapp, E.	4	Battersea	Sydenham H. S.
Knight, W.	4	Belleville	
Knox, R. H., B.A.	2	Coldstream, Ont.	Toronto University.

NAME.	Year of Attendance.	Summer Residence.	Where Educated.
Laidlaw, R.	3	Georgetown	Owen Sound C. I.
Laing, A.	2	Baltimore	Port Hope C. I.
Laird, Annie L.	6	Winnipeg	Kingston C. I.
Laird, W. L.	4	Kingston	Kingston C. I.
Lake, Ethel	1	Sydenham	Sydenham H. S.
Lambert N. Be'trce	1	Kingston	Kingston C. I.
Lane, D. J.	1	Kinlough	Walkerton H. S.
Lavell, Marion F.	1	Smith's Falls	Smith's Falls.
Law, C. E. L.	4	Solina	Oshawa H. S.
Lawrence, C. W.	3	Smyrna, Turkey	Leicester Acadamy, Mass.
Leitch, A.	6	Strathroy	Strathroy C. I.
Leitch, G. C.	3	Dutton	Dutton H. S.
Liggett, R. H.	1	Garden Hill	Millbrook.
Letherland, A.	2	Elginburg	Kingston C. I.
Lindsay, Muriel.	5	Portsmouth	Kingston C. I.
Lipman A.	1	Kingston	Kingston C. I.
Little, A. W.	1	Atwood	Listowel.
Livingston, C. W.	2	Kingston	Kingston C. I.
Logie, E. S.	1	Winchester	Model, Grammar and Normal.
Losee, J. R.	5	Collins' Bay	Kingston C. I.
Low, Constance M.	3	Ottawa	Kingston C. I.
Lowe, Maysie.	1	Kingston	Presbyterian Ladies College, Ottawa.
Lynd, L. E.	3	Fennells	Bradford, Owen Sd. C. I., Univ. Coll.
Maguire, J. D.	1	Kingston	Regiopolis College.
Malcolm, Lindsay.	4	Stratford	Stratford C. I.
Malcolm Wyatt.	3	Woodstock	Woodstock C. I.
Mallen L.	4	Kingston	Regiopolis College, Kingston.
Malloch, T. A.	1	Hamilton	Highfield School, Hamilton.
Matheson, Murdoch	1	Armow	Kincardine, H. S.
Matthews, Jessie E.	1	Almonte	Almonte.
Mattock, Edna M.	1	Almonte	Almonte.
Maxwell, D'sy W. M.	1	Kingston	Kingston C. I.
May, H. P.	4	Little Current	Meaford H. S.
Meldrum, G. E.	4	Ottawa	Ottawa C. I.
Michell, Kathleen.	4	Perth	Perth C. I.
Millar, Edna A.	1	Brockville	Brockville C. I.
Miller, Cora.	4	Aylmer	Aylmer C. I.

NAME.	Year of Attendance.	Summer Residence.	Where Educated.
Miller, Emma M...	2	Toronto.....	Collingwood.
Milliken, J. B.....	3	Strathroy.....	Strathroy H. S.
Mills, Frances W..	2	Kingston.....	Kingston C. I.
Moffat, W. J.....	3	Seaforth.....	Owen Sound C. I.
Montgomery. A. R.	3	Kingston.....	Kingston C. I.
Montgomery, I. A..	3	Pleasant Valley.....	Iroquois H. S.
Montgomery, W.H.	4	De Grass, N. Y.....	Bowmanville H. S.
Moore, W.....	4	Braeside.....	Carleton Pl. H. S.
Morden, D. N.....	4	Kingston.....	Picton H. S.
Moyer, H. H.....	2	Buffalo, N.Y.....	Barrie C. I.
Muir, Jessie.....	2	Almonte.....	Arnprior H. S.
Mulloy, L.....	3	Winchester.....	Morrisburg C. I.
Mulloy, Lulu E.....	2	Vankleek Hill.....	Morrisburg C. I.
Munro, Jean.....	2	Chesterville.....	Kingston C. I.
Munro, Maggie B..	4	Iroquois.....	Iroquois H. S.
Munro, P. F.....	6	Aylmer.....	Williamstown H. S.
Murday, A. M.....	2	Alliston.....	Barrie C. I.
Murphy, W. E.....	6	Rosemount.....	Collingwood H. S.
MacArthur, Annie M	2	Washburn.....	Kingston C. I.
MacArthur, Donelda	1	Cardinal.....	Ottawa Ladies' Coll.
McArthur, D. A.....	1	Dutton.....	Dutton H. S.
McAskill, J.....	2	Highgate.....	Ridgetown C. I.
McCallum, J. F.....	2	Brewer's Mills.....	Gananoque H. S.
McCammon, John G.	1	Gananoque.....	" "
McConkey, Eva F.	3	Brockville.....	Brockville C. I.
McCormack, Irene.	5	Kingston.....	Kingston C. I.
McCracken, H. B.	4	Toronto.....	Jameson Ave. Col. Inst., Toronto.
McCrimmon, J. R.	3	Dundurn, Assa.....	Private Tuition.
McCuaig, H. D.....	3	Dalston.....	Barrie C. I.
McCutcheon, J. M.	5	St. Thomas.....	Listowel H. S.
McDermott, J. J....	4	Kingston.....	Kingston C. I.
McDonald, A. D...	3	Mountain View, Alberta.....	Pictou Ac'y, N. S.
Macdonald, J.....	4	Deseronto.....	Brockville C. I.
MacDonald, N. S...	2	Toronto.....	Bowmonville H. S.
McDonald, R. J...	3	Golspie, Ont.....	Woodstock C. I.
McDonell, A. D....	1	Lancaster.....	Williamstown H. S.
Macdonnell, El'nr M	2	Kingston.....	Kingston C. I.
Macdonnell, J. M..	4	Kingston.....	" "
McDougall, L. M..	4	Brockville.....	
McDonough, J. H..	1	Berlin, Germ.....	Jarvis St. Coll. I. Toronto.
McEachern, J. G...	2	Holland Landing...	Guelph C. I.
McEachran, Mary.	3	Strathburn.....	Glencoe H. S.

NAME.	Year of Attendance.	Summer Residence.	Where Educated.
Macfarlane, An'e S.	2	Franktown	Carleton Pl. H. S.
Macfarlane, Crs'ne S	3	Franktown	" " "
Macfarlane, D.	3	Hamilton	Private Tuition.
Macfarlane, Mary B.	2	Franktown	Carleton Pl. H. S.
McGill, B. A.	4	Oakville	Lindsay C. I.
McGlennon, A. C.	3	Colborne	Colborne H. S.
Macgillivray, Flr'nc.	4	Kingston	Kingston C. I.
McGillivray, J. M.	2	Picton	Picton H. S.
McGregor, Annie K.	5	Almonte	Almonte H. S.
McGregor, D. A.	3	Tiverton	Kincardine H. S.
Macgregor, Grace.	5	Almonte	Almonte H. S.
McIlroy, C.	3	Milburn	Perth C. I.
MacInnis, G. L.	2	Vankleek Hill	Vankleek Hill H. S.
MacInnis, Isabel	1	" "	" " "
MacIntosh, C. R.	1	Athens	Owen Sound C. I.
Mackintosh, Helen C	3	Madoc	Madoc H.S., Galt C.I.
MacIntosh, W. D.	2	North Bruce	Port Elgin H. S.
MacKay, J. M.	5	Kintore	Ingersoll and London C. I.
MacKay, Minnie	2	Smith's Falls	Smith's Falls H. S.
McKechnie, Phoebe	1	Wiarton	Wiarton H. S.
McKee, W. W.	4	Wexford	Harbord St. C. I., Toronto.
MacKenzie, D. S.	1	Regina, Assa.	Owen Sound C. I.
MacKenzie, Jessie J.	1	Hamilton	
MacKenzie, Maude	4	Gananoque	Gananoque H. S.
MacKenzie, Win'wd	2	St. Thomas	St. Thomas C. I.
McKiel, H. W.	1	Gananoque	Alexandria H. S.
McKim, C. W.	3	Winnipeg	Wycliffe College.
MacKinnon, G. W.	2	Beaverton	Harbord St. C. I., Toronto.
McLaughlin, R. E.	1	Spencerville	Morrisburg C. I.
McLean, Marion	3	London	London C. I.
MacLennan, C. Lil'e	4	Port Hope	Port Hope H. S.
McLellan, D.	5	Forester's Falls	Pembroke H. S.
McLeod, K. C.	6	Golspie	Woodstock H. S.
McLeod, N.	4	Dunvegan	Alexandria H. S.
McManus, Emily	6	Chesly	
McMichael, Mary W	2	Williamsville	Kingston C. I.
MacMillan, G. O.	4	Wiarton	Stratford C. I.
McNabb, Joseph	3	Ottawa	Lindsay and Ottawa C. I.
Macnamara, R.	1	Winona	Southampton P. S.
McNeil, W. K.	1	Markham	Woodstock C. I.

NAME.	Year of Attendance.	Summer Residence.	Where Educated.
McPherson, Ed'th L	4	Prescott	Prescott H. S.
McPherson, P. G.	2	Bolsover	Lindsay C. I.
McQuarrie, J.	1	Argyle	" "
McRae, Caroline J.	3	Perth	Kingston C. I.
Nesbitt, Mabel E.	2	Kingston	Kingston C. I.
Nicol, J. L.	3	Jarvis	Port Dover H. S.
Nicol, Margaret A.	4	Napanee	Ingersoll H. S.
Ockley, Beatrice	3	Kingston	Kingston C. I.
O'Connell, Margr'te.	4	Peterborough	Peterborough C. I.
Odell, Lena	3	Belmont	Brockville C. I.
O'Donnell, Flr'nce	4	Kingston	Kingston C. I.
Oldham, M. E.	1	Chatsworth	Owen Sound C. I.
Omond, M. N.	1	London	London C. I., and Western Univ.
Orr, W. J.	3	Kingston	Kingston C. I.
Osborne, N. A.	4	Waterville, N.S.	Dalhousie College, Halifax.
Osgoode, J. A.	1	St. Thomas	St. Thomas C. I.
Ostrom, Ethel L.	5	Alexandria	Alexandria H. S.
Parker, H. R.	1	Calgary	Guelph C. I.
Parsons, J. E.	1	Toronto	Toronto J'c. C. I.
Patterson, Harriet.	3	Athens	Brockville C. I.
Paul, C. A.	1	Newburgh	Newburgh H.S., Napanee C. I.
Pearce, W. R.	4	Wallacetown	Dutton H. S.
Penman, A. G.	4	Ottawa	Pictou Academy.
Penney, Eliz'bth K.	3	St. Thomas	London C. I.
Pidgeon, E. L.	3	Markham	Morrin.Coll., Quebec.
Platt, G. A.	4	Portsmouth	Kingston C. I.
Polson, J. A.	2	Kingston	" "
Polson, S. M.	4	Kingston	" "
Pomeroy, J. C.	3	Kincardine	Mount Forest H. S.
Poole, M. Edna	4	Poole's Resort	Brockville C. I.
Pratt, Pauline I.	2	Peterboro	Peterboro C. I.
Pringle, G. W.	3	Madoc	Madoc, C. I.
Pringle, J. F.	4	Cornwall	Dufferin Gram'r Sch.
Rafter, R.	2	Arthur	Hillcroft Acadamy.
Ralston, G. D.	2	Eganville	Hamilton C. I.
Ramsay, D. C.	3	Plattsville	Woodstock C. I.
Raymond, A. L.	5	Williamstown	Williamstown H. S.
Reid, Jean G.	2	Renfrew	Renfrew C. I.

NAME.	Year of Attendance.	Summer Residence.	Where Educated.
Reid Lulu	4	Kingston	Kingston C. I.
Reynolds, B. C	2	Kemptville	Athens H. S.
Reynolds, Lil'n M.	2	Kemptville	" "
Rhoades, H. G	2	Hamilton	Rugby School, Eng.
Richardson Elz'bth	1	Kingston	Kingston C. I.
Richardson, J. A	3	Kingston	" "
Richardson, Kate	2	Brockville	
Rintoul, A	2	Balderson	Almonte H. S.
Robb. D	2	Battersea	Sydenham H. S.
Roberts, W. H	1	Sharbot Lake	Hillcroft Acadamy.
Roberts, W. C	3	Carleton Place	Carleton Pl. H. S.
Robinson, G. D	4	Solheima P.O., Alta.	Albert Coll., Belleville.
Robinson, J. C	2	Newdale, Man	Man. Coll., Winnipeg.
Robinson, Mabel G.	3	Kingston	Kingston C. I.
Roddick, A. M	4	Lyndhurst	Athens H. S.
Rolls, J. C	1	Hamilton	Hamilton C. I.
Ross, G. E	1	Hilton	Albert Coll., Belleville.
Rowe, Rebecca	1	Valleyfield, Que	Gault Instit., Valleyf.
Russell, Ella	3	Ottawa	Ottawa C. I.
Saunders, Elsie E.	4	Kingston	Kingston C. I.
Schofield, S. J	4	Kingston	Kingston C. I.
Scott, Anna	1	Kingston	
Scott, A. K	9	Iron Mount'n, Mich.	Woodstock C. I.
Scott, Bessie M	1	Ottawa	Univer. of Toronto.
Scott, Carrie L	2	Napanee	Napanee C. I.
Scott, Elizabeth	1	Ayton	Durham.
Scott, J. M	1	Thamesford	Guelph C. I.
Scott, Jean	4	Kingston	Kingston C. I.
Scott, R. A	4	Walkerton	Owen Sound C. I.
Sears, J	4	Kingston	Kingston C. I.
Seymour, J. A	2	New Westminster, B.C.	
Sharpe, Helena A.	4	Odessa	Kingston C. I.
Shaver, Alice	4	Woodstock	Woodstock C. I.
Shaver, C. A	1	Athens	Morrisburg C. I.
Shaver, J. A	2	Morewood	" "
Shaver, J. M	2	Grantley	" "
Shaver, T. P	1	Cornwall	" "
Shirreff, W. T	1	Ottawa	Pembroke.
Simmons, G. E	2	Marmora	Trenton H. S.
Simpson, J. M	1	Kingston	Kingston C. I.
Sinclair, J	4	Toronto	Toronto University.

NAME.	Year of Attendance.	Summer Residence.	Where Educated.
Sine, F. L.	3	Meaford	Hawkesbury
Singleton, Jessie W.	3	Kingston	Carleton Pl. H. S.
Smart, R. S.	1	Ottawa	Jarvis St. Col. I., Tor.
Smith, G. H.	3	Kingston	Kingston C. I.
Smith, Harriet I.	1	South March	Carleton Pl. H. S.
Smith, Jessie B.	2	Kingston	Kingston Ladies' Coll.
Smith, R. D.	3	Montreal	McGill Normal Sch'l.
Smith, T. C.	8	Smith's Falls	
Snyder, G.	3	Godfrey	Sydenham H. S.
Snyder, H. A.	1	Crystal Beach, Ont.	Private Tutors.
Solmes, Harriet M.	3	Picton	Picton H. S.
Somerville, R. H.	1	Morton	Gananoque H. S.
Spankie, H.	1	Wolfe Island	Kingston C. I.
Speers, J. A.	4	Alliston	Barrie C. I.
Spotswood Edna	2	Riceville	Alexandria H. S.
Starr, Hannah J.	1	Pickering College	Jameson Av. C. I., Toronto.
Stead, J. H.	3	Lyn	Brockville C. I.
Stevenson, R. M.	4	Ridgetown	Ridgetown C. I.
Stewart, D. J.	5	Waba	
Stewart, Lily D.	2	Waba	Renfrew H. S.
Stewart, J. A.	1	Kincardine	Kincardine H. S.
Stewart, R. T.	4	Mitchell	Stratford C. I.
Stilwell, G. B.	2	Heathcote	Meaford H. S.
Stothers, Minerva E.	3	Ottawa	Ottawa C. I.
Stott, William	2	Sapperton	Columbian Coll., New Westminster.
Sully, L. K.	3	Ottawa	Ottawa C. I.
Swanson, W. W.	4	Oshawa	Oshawa H. S.
Taggart, B. C.	1	Lanark	Athens H. S., Brockville C. I.
Tanton, F.	3	Alvinston	London, C. I.
Thompson, Basil W.	2	Ottawa	Pembroke.
Thompson, R. M.	1	Dundela	Pembroke H. S.
Timmerman, M'ry E.	5	Odessa	Kingston C. I.
Tod, A. S.	3	Maguire	Lucan H. S.
Tomkins, Eliz'bth A.	2	Hintonburg	Ottawa C. I.
Torrie, A. E.	1	Macleod, Alta	
Tracey, W. R.	2	Parry Sound	Hamilton C. I.
Tuck, J. R.	2	Ottawa	Guelph C. I.
Tulley, C. J.	1	Picton	Picton H. S.
Turner, N. L.	2	Hamilton	Hamilton C. I.
Twohy, Henrietta E.	4	"	" "

NAME.	Year of Attendance.	Summer Residence.	Where Educated.
Uglow, W. L.....	3	Kingston...	Kingston C. I.
Urquhart, J. R.....	2	Maitland...	Maitland Academy.
Usher, W. C.....	3	Wicklow.....	Brighton H. S.
Van Dusen, E.....	2	Far Rockaway, N.Y.	Napanee C. I., Picton H. S.
Van Ness, C. S.....	3	Wolfe Island.....	Kingston C. I.
Voaden, A.....	4	St. Thomas.....	St. Thomas C. I.
Wallace, Sm'l. A...	2	Haley's Station.....	Renfrew C. I.
Wallace, W. G.....	2	Metcalfe.....	Kemptville.
Walsh, M. J.....	3	Kingston...	Kingston C. I.
Ward, H.....	4	Toronto.....	Berlin H. S.
Watt, W. J.....	4	Walkerton..... ...	Walkerton H. S.
Way, A. E.....	1	Pickering....	Pickering College.
Weaver, A. H. M.	2	Trenton.....	Trenton H. S.
Weaver, Ora O.....	2	Trenton.....	Trenton.
Webb, J. R.....	1	Effingham.....	Pickering College.
Weir, Jas.....	1	Prince Albert, N.W.T.....	Petrolia H. S.
Weir, W. J.....	2	Manion.....	Perth C. I.
Whinton, W. E. H.	5	Kingston...	Kingston C. I.
White, H. P.....	5	Pembroke.....	St. Andrew's Coll., Toronto.
Whitehead, Jas....	4	Rossmount..	PortHope H. S.
Williams, L. J.....	4	Watford.....	Watford H. S.
Williamson, Flr'nc.	4	Kingston.....	Kingston C. I.
Wilson, A.....	2	Warkworth.....	Campbellford H. S.
Wilson, Dorothy...	2	Bath.....	Oakville H. S.
Wilson, G. H.....	1	Ottawa.....	Ottawa C. I.
Wood, A. V.....	1	Peterboro.....	Peterboro C. I.
Wood, G. C.....	2	Cushendall....	Victoria University.
Wood, H. S.....	4	Peterboro	Peterboro C. I.
Woodland, Muriel E.	2	Ottawa.....	Ottawa C. I.
Workman, H. C....	3	Kingston...	Kingston C. I.
Wormwith, N. B...	4	Kingston...	Kingston C. I.
Wright, M. L.....	1	Birchton, Que.....	Iroquois H. S., Morrisburg C. I.
Wright, Robt.....	2	Hagersville.....	
Young, J. H.....	1	Gresham P.O.....	Port Elgin.
Yowmans, A. C...	1	Albany, N.Y.....	Whitney's Point, H.S.

POST-GRADUATE STUDENTS (In Arts.)

Name	Address.
Asselstine, E. B., B.A.	Wilton, Ont.
Asselstine, Lizzie, B.A.	Asselstine P.O.
Bailey, W. L., M.A.	Gravenhurst, Ont.
Barr, Janet, B.A.	Seaforth
Beckett, S. E., B.A.	Kintail P.O.
Brown, A. H., B.A.	Oil Springs, Ont.
Brown, Geo. A., B.A.	Oak-Grove
Brydon, Robert, B.A.	Crossfield, Alta.
Clark, Grace, M.A.	London, Ont.
Donnell, J. A., M.A.	Beaverton
Duncan, T. S., M.A.	Ewing, Alberta
Fetterly, H. B., B.A.	Winchester
Fraser, J. W., B.A.	Kingston
Hewton, E. Gertrude, M.A.	Kingston
Holliday, A., B.A.	Dubbo, New S. Wales, Australia
Kerfoot, H. W., B.A.	Prescott
Knox, R. H., B.A.	Coldstream, Ont.
Laird, Annie L., B.A.	Winnipeg
Marshall, D. H. J., B.A.	Campden, Ont.
Munro, P. F., B.A.	Aylmer, Ont.
MacDonald, J. M., B.A.	Orangeville
Macdonnell, Logie, M.A.	Toronto
MacDougall, F. H., M.A.	Maxville, Ont.
McEachran, J. M., M.A.	Glencoe, Ont.
McLean, R. A., B.A.	Smith's Falls
McManus, Emily, M.A.	Chesley, Ont.
Pentland, Geo. E., B.A.	Heathcote
Perney, F. E., B.A.	Ottawa
Petrie, J. A., B.A.	Belleville
Ramsay, Wm., B.A.	Plattsville, Ont.
Solandt, D. M., B.A.	Kingston
Teskey, Kathleen, M.A.	Appleton, Ont.
Wallace, H. T., B.A.	Hamilton
Watson, Alice R., B.A.	Kingston
Williams, Mary I., B.A.	St. Thomas
Wilson, R. A., M.A.	Renfrew
Woods, I. H., B.A.	Leesboro P.O., Ont.

GENERAL STUDENTS.

NAME.	ADDRESS.
Abbott, Muriel E.	Kingston
Birch, Samuel R.	Kingston
Crawford, Pearl E.	Kingston
Clarke, H. M.	Almonte
Douglas, J. H.	Hornby
Evans, A. R.	Omemee
Gibson, M. J.	Kingston
Heywood, Caroline G.	Montreal
Hoeven, Mathilda	Berlin, Germany
Jackson, R. C.	Arrowhead, B.C.
Jeffery O. M.	Elder's Mills
Maloney, T. L.	Bulger
Mundell, Vera	Kingston
Macfarlane, D.	Hamilton
MacLeod, J. A.	Orwell, P.E.I.
Oldham, M.E.	Chatsworth
Rafter, R.	Arthur
Rees, Irene	Kingston
Salisbury, C. C.	Milberta
Shaver, J. M.	Grantley
Shields, Luella E.	Kingston
Stevenson, Helen	Kingston
Thompson, T. D.	Spring Valley
Urquhart, J. R.	Maitland
Walsh, Martin J.	Kingston
Williams, J. L.	Kingston
Wright, Muriel	Ottawa

STUDENTS IN THEOLOGY.

Name and Year.	Address.
Bailey, W. L., B.A., 1st year	Gravenhurst
Beckett, S. E., B.A., 3rd year	Kintail, P. O.
Beveridge, R. W., 1st year	Port Elmsley
Black, B. S., B.A., 1st year	Kingston
Bright, Alfred, 2nd year	Montreal
Brown, G. A., B.A., 1st year	Oak Grove
Caldwell, J.S., B.A., 2nd year	Watson's Corners
Cameron, A.E., B.A., 2nd year	Wemyss, Ont.
Donnell, J. A., M.A , 2nd year,	Beaverton, Ont.
Ferguson, John, B.A., 2nd year,	Heaslip, New Ontario
Hutchison, J. H., 3rd year	Brechin
Kennedy, William A., 1st year	Stratford
Kidd, C. E., B.A., 2nd year	Prospect, Ont.
Kidd, W. J., B.A., 2nd year	Prospect, Ont.

Name and Year.	Address.
Lindsay, M. A. F., B.A., 2nd year	Sydenham, England
Marshall, D. H. J,, B.A., 1st year	Campden
Miller, J. H., B.A., 3rd year	Whitby
Morden, D. N., 1st year	Kingston
Munro, M. F., B.A., 2nd year	Lancaster
McConachie, J. C., B.A., 3rd year	Cranston
MacDonald, J. M., B.A., 2nd year	Orangeville
Macdonnell, Logie, M.A., 3rd year	Toronto
MacInnes, W. H., B.A., 3rd year	Vankleek Hill
McKeracher, D. A., B.A., 2nd year	Sutton West
MacKinnon, J.D., 2nd year	East Lake, N. S.
MacQuarrie, W. J., 3rd year	Kingston
Petrie, J. A., B.A., 4th year	Belleville
Stevenson, R. McK, 1st year	Ridgetown
Stewart, D. J., 1st year	Waba
Stewart, J. A., 2nd year	
Strachan, C. C., 3rd year	Glencoe
Wallace, H. T., B.A., 3rd year	Hamilton
Watt, W. J., 1st year	Walkerton
Whiting, Chas. C., M.A., 3rd year	
Woods, Isaac H., B.A., 2nd year	Consecon

PRACTICAL SCIENCE STUDENTS. 1904-05.

NAME.	ADDRESS.
Agnew, Cyril W.	Douglas, Man.
Akins, J. R.	Kinburn
Alder, William R.	Prescott
Arthur, Alfred J.	Carleton Place
Bailie, A. A.	Billing's Bridge
Baker, Carey W.	Kingston
Baker, F. Godfrey	Kingston
Bartlett, James	Gananoque
Bateman, G. C.	Kingston
Bennett, Joseph	Kingston
Berney, K. C.	Athens
Bertram, Thomas S.	Dundas
Birkett, Edmund H.	Kingston
Brewster, Fred. A.	Banff, Alta.
Britton, R. H.	Gananoque
Brown, Charles D.	Whitehaven, England
Brown, Edward W.	Hawkesbury
Browne, P. J.	Kingston
Cairnes, D. D.	Columbia, B.C.
Calvin, J. D.	Garden Island, Ont.
Cameron, Donald H.	Leeds Village, Que.
Campbell, A. S.	Stonewall, Man.

NAME.	ADDRESS.
Campbell, Wm. E.	Dutton
Campbell, W. M.	Eganville
Cartwright, Cosmo T.	Vancouver, B.C.
Code, L. B.	Kingston
Code, E. S. L.	Kingston
Coe, A. P.	Madoc
Collins, E. A.	Copper Cliff, Ont.
Connell, Fred. M.	Spencerville
Cooper, R. H.	Springhill, N.S.
Cordukes, John P.	Elginburg
Cumming, Austin L.	Cornwall
Cummings, Alfred	Fort Steele, B.C.
Cunningham, Stanley L.	Kingston
Curtin, Chas. J.	Brockville
Dalton, Chas. P.	Kingston
Dempster, Hubert O.	Gananoque
Denovan, Jno.	Dalkeith
Dobbs, Gerald G.	Kingston
Dobbs, W. Stewart	Kingston
Dunkley, J. B.	Picton
Fairlie, T. U.	Kingston
Faucher, Cyril A.	Rochester, U.S.A.
Fee, Tom.	St. Catharines
Finnie, H. V.	Peterboro
Fleming, A. G.	Craigleith
Fleming, David B.	Craigleith
Fleming, A. A.	Craigleith
Fleming, Henry.	Craigleith
Fleming, John E.	Craigleith
Gage, R. G.	Riverside, Cal.
Gagnon, J. A.	Chicoutimi, P.Q.
Gardner, Keith V.	Ottawa
Garrow, R. M.	Webbwood
Germain, Henry A.	Kingston
Gillis, Walter C.	Matapedia, P.Q.
Gleeson, L. John.	Kingston
Grant, Alex. McD.	West Merigomish, N.S.
Graves, R. B. S.	Kingston
Grenon, J. F.	Chicoutimi, P.Q.
Haddow, A. W.	Simcoe
Harding, W. M.	Oshawa
Henderson, E. W.	Almonte
Herriot, George H.	Souris, Man.
Holland, A. A.	Ottawa
Houser, W. H.	Canboro
Houston, Jas. H.	Omaha, Nebr.
Irwin, R. T.	Norwich, Ont.

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NAME.	ADDRESS.
Jackson, G. J.	Simcoe
Jenkins, W. E.	Orwell, P.E.I.
Jackson, F. C.	Kingston
Jeffery, R. T.	Elder's Mills
Jeffery, John J.	Elder's Mills
Johnston, W. A.	Athens
King, J. A. S.	Souris, Man.
King, J. L.	Fairfax, Man.
Lavell, Frank M.	Smith's Falls
Lavoie, Edward	Baie-St. Paul, Que.
Lazier, Stewart	Belleville
Lennox, J. S.	Kingston
Malloch, Edmund S.	Hamilton
Malloch, G. S.	Hamilton
Mateer, Thomas J.	Kingston
Matheson, Hugh	Armow P.O., Ont.
Millar, Russel	Kingston
Milliken, J. B.	Strathroy
Montgomery, O. M.	Lanark
Murphy, A. A.	Portland, Ont.
Murray, C. W.	Mission City, B.C.
McArthur, Frank	Gore Bay, Ont.
McCandless, Isaac	Kingston
McClennan, W. D.	Peterborough
McColl, Chas. R.	Chatham
McCulloch, R.	Souris, Man.
McEachern, J. J.	Gravenhurst
McEwen, D. F.	Hensall, Ont.
McEwen, R. L.	Carleton Place
McGinnis, T. A.	Belleville
McGinnis, W. C.	Belleville
MacIlquham, W. R.	Lanark
McKay, Bertram R.	Cornwall
McKay, G. J.	Owen Sound
Mackenzie, H. A.	Moulinette, Ont.
McKenzie, Murdoch	Scotstown, Que.
McLaren, W. M.	Osceola
Macphail, J. G.	Orwell, P.E.I.
Nicoll, H. W.	Norwood, Ont.
Norrish, B. E.	Walkerton, Ont.
Orford, Colin	Kingston
Orr, F. O.	Peterboro
Ostrom, S. A.	
Oswald, W. A.	Pontypool, Ont.
Pennock, E. L.	Brockville
Peppard, Hugh	Springhill, N.S.
Pinkerton, W. A.	Portland, Ont.

NAME.	ADDRESS.
Potter, Robert	New York City
Pound, Richard	Kingston
Pringle, J. F	Cornwall
Rice, F. W	Perth
Richardson, George T	Kingston
Richmond, D. W	Brighton, Ont.
Robertson, J. J	Fergus Falls, Minn.
Robinson, L. A	Hamilton
Rogers, W. R	Thorndale, Ont.
Sands, J. M	Kingston
Saunders, H. C	Kingston
Scott, A. W	Brooklyn, N.Y.
Scott, H. H	Perth
Sears, John	Kingston
Shaver, Peter A	Grantley, Ont.
Shorey, P. M	Oshawa, Ont.
Sloan, David	Perth
Smith, Roy R	Bristol, New Hamp., U.S.A.
Smith, S. Gordon	Aylmer, Que.
Smyth, Walter L	Pembroke
Stanley, Oswald	Port Colborne, Ont.
Stewart, A. George	Ottawa
Stidwill, Frank	Dutton, Ont.
Stiles, L. P	Cornwall
Speirs, Thos	Appleton
Stott, James	Sapperton, B.C.
Strachan, B. O	Kingston
Sweezey, R. O	Chicoutimi, Que.
Swift, C. J	Kingston
Thornton, L. A	Peterboro
Timm, W. B	Westmeath, Ont.
Toffey, F. H	Portland, Ont.
Trueman, J. D	St. John, N.B.
Twitchell, K. S	St. Albans, Vermont
Walkem, H. C. C	Kingston
Watson, A. R	Beaverton, Ont.
Way, W. C	Lindsay
Weld, W. E	London, Ont.
Woolsey, W. J	Beach Lake, Pa.
Wright, Albert	Brockville
Wright, Geo. C	Kingston

STUDENTS IN MEDICINE, 1904-5.

Name and Year.	Address.
Allaire, Joseph, 1st year	St. Laurent, Que.
Asselstine, B., 2nd year	Wilton
Baker, J. O., 1st year	Newington, Ont.

Name and Year.	Address.
Baker, A. E., 3rd year	Oznabruck Centre, Ont.
Ballantyne, W. H., 4th year	Kingston
Beggs, William, 1st year	Hallville
Bell, A. M., 3rd year	Moscow, Ont.
Bolton, E., 3rd year	Phillipsville, Ont.
Bow, Mac R., 1st year	Winchester
Bowen, H. M., 2nd year	Gananoque
Brown, J. E., 2nd year	Pear Tree Grove, Jamaica, B.W.I.
Buck, Lloyd L., 1st year	Railton, Ont.
Burke, M. L., 2nd year	Port Antonio, Jamaica, B.W.I.
Byers, J. C., 1st year	Eganville
Byrne, E. P., 1st year	Kingston
Carmichael, S. V., 1st year	Spencerville
Carmichael, M. A., 3rd year	Whycocomagh, C.B.
Carto, G. E., 2nd year	Kingston
Cays, Fred A., 2nd year	Kingston
Chant, J., 4th year	Chantry
Charbonneau, J. E., 2nd year	Hawkesbury
Charlebois, Jos. A., 2nd year	Hull, Que.
Clancy, J. P. I., 1st year	Newburgh
Cliff, George F., 3rd year	Carleton Place
Cochrane, Hugh, 3rd year	Sunbury
Code, J. H., 4th year	Kingston
Collinson, J., 2nd year	Piercefield, N.Y.
Connolly, H. A., 1st year	Kingston
Connolly, N. W., 1st year	Kingston
Consitt, E. C., 4th year	Perth
Cornett, W. F., 1st year	Kingston
Costello, M. C., 1st year	Calgary, Alta.
Cotnam, I. D., 1st year	Pembroke
Coulcombe, P. O., 1st year	Cheneville, Que.
Craig, W. H., 1st year	Kingston
Curphey, A. G., 2nd year	Kingston, Jamaica, B.W.I.
Donevan, Fred. J., 3rd year	Gananoque
Doyle, J. F., 3rd year	Kingston
Duchesne, J. H., 2nd year	Ste. Anne de Prescott, Ont.
Dudley, William H., 4th year	Pembroke
Dunlop, H., 1st year	Kingston
Fee, Donald L., 1st year	Camden East
Ferguson, J. Y., 4th year	Renfrew
Ford, W. H., 2nd year	Bridgetown, Barbadoes, B.W.I.
Franklin, V. G., 2nd year	Bridgetown, Barbadoes, B.W.I.
Gaudet, E. A., 4th year	Moncton, N.B.
Gavin, W. F., 3rd year	Melcombe, Ont.
Girvin, A. W., 4th year	Stella
Gordon, G. D., 4th year	Kingston
Graham, Colin W., 3rd year	Kingston

Name and Year.	Address.
Grant, D. D., 3rd year	Lancaster, Ont.
Greaves, G. A., 2nd year	Kingston
Grimshaw, M. E., 4th year	Wolfe Island
Halladay, R. W., 4th year	Elgin
Hambly, W. R., 1st year	Napanee
Haycock, G. G., 4th year	Kingston
Herald, J. G., 3rd year	Kingston
Hogan, J. T., 4th year	Perth
Hourigan, J. M., 4th year	Smith's Falls
Hunt, A. H., 4th year	Bridgetown, Barb.
Hurtubise, R., 1st year	Ste. Anne de Prescott, Ont.
Jeffery, J. R. S., 2nd year	Georgetown, Demerara, Br. Guiana, S.A.
Johnston, A. C., 2nd year	Kingston
Johnston, John, 2nd year	Combermere, Ont.
Keeley, Frank J., 2nd year	Railton
Kelly, J. M., 1st year	Addison, Ont.
Kennedy, W. D., 1st year	Jockvale, Ont.
Keyes, S. J., 4th year	Kingston
LaBarrie, A. L., 2nd year	Port of Spain, Trinidad
Laidlaw, Campbell, 2nd year	Georgetown, Ont.
Laidley, Wallace G., 3rd year	Odessa
Laing, A. V., 1st year	Dundas
Lapierre, J. M., 1st year	Buckingham, Que.
Lawler, Charles A., 3rd year	Kingston
Lesses, Max, 4th year	Kingston
Longmore, H. Bruce, 1st year	Camden East
Locke, Mahlon, 4th year	Brinston's Corners
Losee, J. R., 2nd year	Collins' Bay, Ont.
Lowe, Felix E., 3rd year	Montego Bay, Jamaica
Little, Thomas, 1st year	Kingston
Mabee, Horace C., 1st year	Odessa
Mahood, A. E., 4th year	Kingston
Milburn, T. H. H., 1st year	Peterborough
Mills, R. M., 2nd year	Kingston
Moore, H. E., 3rd year	Pickering
Morrison, William, 1st year	Ashgrove
Moxley, Chas. R., 4th year	Kingston
Murtagh, H. J., 1st year	Aylmer, Que.
Myers, E. T., 1st year	Portland
McCallum, Samuel, 2nd year	Brewer's Mills, Ont.
McCambridge, L., 2nd year	Kingston
McCormick, A. M., 2nd year	Ottawa
McCormick, James P., 3rd year	Ottawa
McDermott, James P., 2nd year	Eganville
MacDonald, Archie, 1st year	Frankford
McDonald, Angus, 2nd year	Scotsline, Ont.

Name and Year.	Address.
McDonald, Donald J., 3rd year	Whycocomagh, N.S.
McFadyen, J. Y., 3rd year	Tignish, P.E.I.
MacGillivray, Thos. D., 4th year	Kingston
McIntosh, P. A., 4th year	Dundela, Ont.
McIntosh, F. B., 1st year	Kingston
McKinley, A. G., 3rd year	Chapleton, Jamaica
MacKinnon, D. L., 4th year	East Lake Ainslie, C.B.
MacLachlan, A. J., 4th year	Glencoe
McLean, J. A., 1st year	Kingston
McLellan, Daniel, 3rd year	Forester's Falls, Ont.
McLeod, Neil, 2nd year	Moose Creek
MacMillan, A. D., 4th year	Finch
McNamara, J. P., 2nd year	Stratford
Nicholls, R. F., 2nd. year	Kingston
Nicolle, F. R., 2nd year	Kingston
Nurse, C. T. C., 4th year	Kingston, Jamaica
O'Connor, F. J., 3rd year	Long Point, Ont.
Palmer, W. M. R., 3rd year	Northcote
Patterson, W. R., 3rd year	Kingston
Paterson, R. K., 3rd year	Renfrew
Patterson, Claude A., 1st year	Athens
Patterson, George, 1st year	Stella
Patterson, W. E., 3rd year	Newburgh
Paul, R. D., 2nd year	Selby
Playfair, L. L., 3rd year	Kingston
Porter, W. C., 2nd year	Cleveland, Ohio
Publow, Chas. A., 3rd year	Kingston
Quigley, J. P., 2nd year	Kingston
Ramperrand, J. E., 1st year	Kingston
Randall, George R., 4th year	Seeley's Bay
Reid, James, 3rd year	Renfrew
Reid, George R., 4th year	Kingston
Redden, Herbert, 3rd year	Ernesttown
Rielly, Frank J., 2nd year	Sydenham
Reynolds, Milton E., 4th year	Kempville
Riddick, William, 2nd year	Ottawa
Rigney, Milton, 3rd year	Maberly
Robb, J. J., 4th year	Battersea
Robb, W. M., 4th year	Lunenburg
Robinson, R. H., 1st year	Hamilton Bermuda
Ross, T. R., 1st year	Kingston
Sandwith, B. A., 3rd year	Kingston
Sargent, F. R., 1st year	Kingston
Saunders, T. F., 3rd year	Rhinebeck, N.Y.
Smith, B. A., 4th year	Hartington
Smith, S. H., 3rd year	Chambers
Smith, W. A., 4th year	Kingston

Name and Year.	Address.
Spankie, A. T., 2nd year	Wolfe Island
Spankie, W. E., 3rd year	Wolfe Island
Sparks, J. F., 4th year	Kingston
Spooner, A. C., 4th year	Latimer, Ont.
Spence, H. D. L., 1st year	Kingston
Sproule, E. W., 4th year	Harrowsmith
Snyder, J. B., 3rd year	Lancaster
Stewart, J. R., 3rd year	Waba
Story, G. E., 2nd year	Kingston
Stuart, G. M., 3rd year	Blyth
Sutherland, Bruce, 3rd year	Belleville
Sutherland, Eric, 3rd year	Belleville
Sullivan, H. J., 2nd year	Peterboro
Shannon, Sylvester S., 3rd year	Kingston
Templeton, C. P., 3rd year	Napanee
Thompson, A. Y., 3rd year	Strathroy
Thompson, B. H., 1st year	Kingston
Taugher, W. J., 3rd year	Beachburg
Turnbull, John, 4th year	Lowville
Trousdale, F. H., 2nd year	Hartington
Wade, J. J., 3rd year	Balderson
Wagar, Chas. M., 4th year	Enterprise
Warren, J. W., 3rd year	Harper
Way, S. P., 1st year	Watford
Weaver, H. V., 3rd year	New Bedford, Mass.
Wells, E. J., 1st year	Bouck's Hill
Wightmann, R., 1st year	Lancaster
Williams, E. J. F., B.A., 4th year	Brockville
Williamson, H. J., B.A., 3rd year	Kingston
Young, D. M., 2nd year	Bristol Corners
Young, F. S., 2nd year	Forfar
Young, J. M., B.A., 4th year	Renfrew
Yule, W. L., 1st year	Gananoque

ARTS HONOUR LISTS FROM 1877 TO 1904.

Alcombreck, R. W., Greek II, '96; Latin II, '97.
Aikin, J. A., Philosophy I, '04; Political Science I, '03.
Allen, J., Mathematics I, '04.
Allen, Maggie D., Botany I, '93; Geology I, '93; Zoology II, '93; Histology II, '93.
Allen, T. G., Natural Science I, '88.
Anderson, F. C., Animal Biology II, '00; Botany I, '00.
Anderson, P. McC., History I, '03; Political Science I, '03.
Andrews, D., Mathematics I, 04.
Anglin, F. R., German II, '94; French II, '95; Italian II, '94.
Anglin, R. W., Mathematics I, '97.

Anthony, J., Political Science III, '98; Philosophy I, '00.
Arthur, C. C., Chemistry I, '91; Botany I, '91; Zoology I, '91.
Asselstine, E. B., Mathematics II, '04.
Asselstine, Elizabeth C., German I, '04; French II, '04.
Asselstine, F., Botany I, '97.
Attwood, A. E., Animal Biology II, '95; Botany I, '95.
Ayers, M. H., Botany I, '04; Biology I, '04.
Bajus, Carrie, French I, '01; German II, '01; English III, '01.
Baker, H. M.; Botany I, '91; Zoology I, '91; Geology I, '91.
Baker, M. B., Chemistry II, '00; Geology I, '00.
Baker, W. C., Chemistry I, '95; Mineralogy I, '95; Physics II, '97.
Baker, W. R., Botany II, '96.
Barclay, W. B. C., Latin II, '88; English Literature and History II, '88.
Barker, J., English III, '99; French II, '01.
Barnard, A. T., Latin I, '99; English III, '99.
Barr, Janet, Italian II, '94; French III, '00; German III, '00; English III, '00.
Bates, C. J. L., Philosophy I, '01.
Beall, A. W., Latin I, '88; Moderns I, '88.
Beaton, A. H., History I, '94; Political Science II, '94.
Beaton, K., English III, '97; Latin II, '96.
Beckett, S. E. J., Moral Philosophy I, '04.
Belfour, P. F., Chemistry II, '99; Mineralogy II, '99.
Bell, J. M., Biology I, '99; Chemistry I, '99.
Bellamy, Mabel, English III, '00.
Bennett, C. V., Latin II, '94; Greek II, '94.
Bennett, W. C., Greek III, '97; Latin II, '95.
Bennett, W. H., Latin III, '00; Greek III, '01.
Berlanquet, H. S., Latin II, '96; Greek II, '96.
Bernstein, J. S., History I, '97; Political Science I, '98.
Best, Isabella M., English II, '00; French II, '00; German I, '01.
Billings, T. H., Latin I, '01; Greek I, '02.
Binnie, J., Political Economy I, '88; Philosophy II, '88.
Black, B. S., Latin I, '03; Greek II, '04.
Black, H. H., Latin I, '98; Greek I, '99.
Black, Jean, B., German III, '03; English III, '04.
Bloor, W. R., Botany I, '02; Animal Biology I, '02.
Boddy, Martha, Systematic Mineralogy (only), '93; Zoology II, '93; Histology I, '93; Geology I, '94.
Bolton, L. L., Mineralogy I, '03; Geology I, '03.
Bower, T. T., Animal Biology II, '98.
Bowermann, J. T., Botany I, '89; Zoology I, '89; Geology I, '89;
Boyd, Annie A., Botany I, '98; Biology I, '98.
Boyd, Mabel E., Botany II, '98; Biology III, '98.
Boyle, J., Mathematics II, '91.
Breck, R. W., Mineralogy I, '95; Chemistry I, '95.
Briden, William M., Classics I, '79.
Brisco, N. A., History I, '98; Political Science I, '00.

Brown, A. B., English III, '97; French II, '98; German III, '98; Italian II, '98.
Brown, J. C., English I, '96; History I, '96.
Brown, P. M., Biology III, '04.
Brown, T. C., Political Science I, '01.
Brown, P. W., Botany I, '04.
Bryan, H. W.; Latin I, '94; Greek I, '94.
Bryant, J. F., Latin III, '01; Greek III, '01.
Buchanan, Mabel, French III, '04; History, III, '04.
Burgess, H. H., History I, '96.
Burrows, A. G., Chemistry I, '00; Mineralogy I, '00; Geology I, '01.
Burton, R., English I, '96; Philosophy I, '98.
Caldwell, J. A., History II, '01.
Calhoun, A., Latin I, '01; Greek I, '02.
Cameron, A. R., Latin I, '02; Greek II, '03.
Cameron, C. J., Greek I, '82; Latin I, '82.
Cameron, C. K. O., Histology I, '93.
Cameron, J., English I, '97; German II, '97; French II, '96; Italian I, 97.
Campbell, Annie G., Moderns I, '91.
Campbell, A. L., English III, '97.
Campbell, C. D., Latin II, '95; Greek II, '96.
Campbell, D., English III, '04; Political Science I, '04.
Campbell, P. McG., Mathematics II, '92.
Canon, J. D., Political Science I, '98.
Carmichael, H., Philosophy I, '97.
Carmichael, N. R., Mathematics I, '90; Greek I, '90; Latin I, '90.
Chambers, L. P., English III, '04.
Chambers, R., Botany I, '02; Animal Biology I, '02.
Chisholm, W. I., Zoology I, '93; Botany I, '94; Animal Biology I, '94.
Clark, Grace, German I, '03; French I, '04.
Clark, G. W., Latin I, '99; Greek I, '99; English III, '99.
Clark, J. K., Chemistry II, '95.
Clark, J. W., Geology II, '95.
Clark, R. J., Latin II, '95; Greek I, '95; English I, '95; Political Science II, '95.
Clark, W. T., Latin II, '95; Greek II, '95.
Claxton, J., Latin II, '88.
Claxton, J. A., Moderns I, '88.
Cloney, S. Louise, Italian I, '96. German II, '97; French I, '97.
Cloney, S. E., English I, '96.
Clyde, W., Greek I, '86.
Collison, J., Chemistry I, '98.
Collier, W. H., Mathematics II, '98.
Conn, J. R., English II, '96; Political Science I, '96.
Connell, J. C., Mathematics I, '85.
Connell, J., Latin II, '92; Greek II, '92.

Connolly, H. A., Moderns I, '95; English I, '95.
Connor, Grace, Latin I, '04.
Cook, Gertrude, Latin I, '02; Greek II, '03.
Cooke, J., Latin II, '84; Greek II, '84.
Corkill, E. J., Chemistry II, '89; Botany II, '89.
Cowan, S. G., Mathematics III, '04.
Cowley, R. H., Geology I, '92.
Crawford, W. F., Philosophy II, '00.
Cryan, G., French III, '97; Italian II, '97; German II, '98; English II, '98.
Croskery, R. A., Latin II, '95.
Cummings, J. C., Physics I, '98.
Cunningham, D., Zoology I, '91.
Curle, W., Mathematics I, '89; Political Economy I, '89.
Currie, P. W., Latin II, '96.
Dalton, G. F., History I, '97; Political Science III, '98.
Dark, T. A., Mathematics I, '04.
Davis, B. N., Mathematics I, '81; Chemistry I, '81.
Davis, J. S., Political Science I, '97.
Davis, W. H., Philosophy I, '93.
Day, A. E., Moderns I, '95; English I, '96.
Day, J., English III, '01.
Denyes, J. M., Latin II, '95; Moderns, II, 095.
Detlor, W. T., History II, '97.
Dickson, C. W., Animal Biology I, '00; Chemistry I, '00.
Dolan, G., Latin II, '99; English III, '99; Greek II, '00; History I, '00.
Dolan, J. H., Greek I, '97; Latin II, '98.
Donnell, J. A., History I, '02; Political Science I, '02.
Downing, J., Latin II, '92; Moderns II, '92.
Downing, J. J., Latin II, '91.
Dowsley, W. C., English II, '98; Latin I, '98.
Drennan, Ethel, English III, '00.
Drummond, D. R., Greek I, '89; Latin I, '89.
Drummond, W. J., Greek II, '85; Latin II, '85.
Duff, J.. Greek I, '99; English I, '99.
Duff, K. Isobel, Mathematics I, '04.
Duncan, T. S., Latin I, '04; Greek I, '04.
Dunkley, A. W., Latin I, '98; Greek I, '99.
Dunkley, W. G., Chemistry II, '02; Mineralogy III, '02.
Dunlop, J. G., Moderns I, '86; English Literature and History II, '87.
Dupuis, J. M., Chemistry I, '79.
Durie, C. L., English II, '99; Political Science I, '99.
Dwyer, J. G., Mathematics II, '02.
Dyde, G. E., English II, '93; Greek I, '89; Latin II, '89.
Dyde, S. W., Classics I, '81; Philosophy I, '84.
Easton, W. H., Philosophy I, '93.
Edmison, G. A., Political Science II, '00.

Edwards, C. B., English II, '99; History II, '99.
Elder, Hosie, Political Science I, '04.
Elliott, E., English II, '86; History I, '86; Moderns II, '86.
Ewing, Florence M., French II, '03; English III, '03.
Ewing, W. C., Animal Biology I, '95; Botany I, '95.
Farquharson, R. A., Moderns III, '97.
Farrell, T. H., Mathematics I, '89.
Fee, W. M., Philosophy I, '99.
Fenwick, A. M., Botany I, '90; Zoology I, '90; Geology I, '90.
Ferguson, R., English Literature and History I, '82.
Ferguson, T. R., Mathematics I, '04.
Findlay, J., Mathematics I, '87; Philosophy I, '90.
Finley, W. A., Greek I, '88; Latin I, '88.
Firth, W. P., Chemistry I, '01.
Fitzgerald, Eliza S., Greek I, '84; Latin I, '84.
Fitzpatrick, A., English II, '95.
Flath, Emma, French III, '02; German III, '02.
Fleming, Maude, French I, '03; English III, '03; Italian II, '02.
Fleming, W. S., History III, '04.
Fletcher, W. H., Botany I, '02; Animal Biology I, '02.
Foik, H. J., French II, '02; German I, '02.
Ford, A. B., Chemistry II, '93; Zoology I, '93; Histology I, '93.
Forfar, Lena M., Political Science II, '03.
Fowler, H. C., English Literature and History, '81.
Fox, C. B., Chemistry I, '94; Histology I, '94; Zoology II, '93.
Folger, Marion, Moderns I, '86.
Fraser, Annie E., English I, '95.
Fraser, J. R., Philosophy I, '93.
Fraser, T., English I, '97; Latin III, '98.
Froats, W. C., Greek I, '03; Latin I, '04.
Furlong, T. H., Botany I, '97; Animal Biology I, '97.
Gallup, E. C., English II, '92.
Gandier, A., English Literature and History I, '83; Philosophy I, '83.
Gandier, J. C., Latin II, '01; Greek II, '01.
Gardiner, S. H., Chemistry I, '86; Natural Science I, '86.
Gavin, F. P., Botany I, '96; Animal Biology II, '96.
Geddes, R. W., Latin II, '96; Greek II, '96.
Gibson, J. C., Mathematics I, '92.
Gilfillan, J., Botany II, '96.
Girvin, H. G., Mineralogy II, '01.
Givan, A., Mathematics I, '83.
Givens, D. A., Mathematics I, '78.
Gober, Mai, English I, '98; History I, '99.
Goodfellow, J., English III, '97.
Goodwill, J. E. L., History II, '03; Political Science II, '03.
Gordon, Wilhelmina, Latin I, '04.
Gould, W. H., Mathematics I, '00.

Graham, P. E., French I, '98; German I, '98; Italian II, '98; English III, '98.
Grange, W. A., Political Science II, '98.
Grant, Ethel, German II, '03; French III, '03.
Grant, J. G., Mathematics II, '02.
Grant, W. L., Latin I, '94; Greek I, '94.
Gray, J. M., English II, '02.
Gray, S. H., Latin II, '94; Greek II, '94.
Grey, Stearns, English I, '03; History I, '03.
Grenfell, Caroline, Italian II, '97; German III, '99; French III, '99; English III, '99.
Grenfell, M. Elizabeth, Italian I, '98; French II, '99; German II, '99; English III, '99.
Grey, S., History II, '02.
Griffin, E. S., Latin II, '89; Moderns II, '89.
Griffith, Agnes J., English I, '95; Moderns I, '96.
Griffith, Edna B., Mathematics II, '96.
Guess, G. A., Zoology I, '93; Histology I, '93.
Guess, H. A., Chemistry I, '95; Mineralogy I, '95.
Guggisberg, W., Political Science I, '04.
Hagan, J. W., Botany I, '03; Animal Biology I, '03.
Haig, A., Chemistry II, '88.
Hales, J., Chemistry I, '88; Philosophy II, '89.
Hall, J. R., Political Science II, '96; Philosophy I, '98.
Hall, T. F., Latin I, '04.
Hamilton, C. F., English Literature I, '90; History I, '90.
Harper, A. M., History I, '00; Political Science II, '00.
Hartwell, G. E.; Greek II, '88.
Harvey, K., Italian II, '94; French II, '95.
Hawley, A. T., Latin I, '99; Greek I, '99.
Hay, A. G., Political Economy I, '88; Philosophy II, '89.
Hay, J., Philosophy I, '82; Political Economy I, '84.
Haydon, A., English I, '93; History I, '93; Political Science I, '93.
Hazlett, J. W., Chemistry II, '01.
Heap, F., Greek I, '90; Latin I, '90.
Henderson, G. F., English Literature I, '84.
Henderson, M., Political Science III, '00; English III, '01.
Henstridge, Eliz., English I, '96; History I, '97; French II, '00; German III, '00.
Herbison, R., Greek II, '94; Philosophy I, '96.
Herbison, W. J., English II, '95; Political Science II, '95.
Herchmer, Ethel M., English I, '01.
Hermiston, G. M., History II, '95.
Hewton, Gertrude, English I, '02; German I, '03.
Hiscock, R. C., Petrography and Economic Geology II, '96; Chemistry I, '96; Mineralogy II, '96.
Hoppins, L. W., Animal Biology III, '02.
Hord, A. H., English I, '01.
Horsey, H. E., Mathematics I, '86.

Hugo, F., English I, '93; Political Science I, '93; History I, '94.
Hume, J. P., Mathematics I, '81; Chemistry I, '81.
Hunter, J. McF., English Literature and History I, '86.
Hunter, R. F., History I, '96; English I, '97.
Hunter, W. R., Animal Biology I, '00.
Hutchison, R. A., Mathematics I, '04.
Hutcheson, R. J., Latin I, '92; Greek I, '92.
Ingall, E. E., English III, '03.
Instant, F. P., English II, '96.
Ireland, F. A. W., Greek I, '91; Latin I, '91; English Literature I, '91.
Irvine, R., Latin II, '81.
Irvine, William H., Mathematics I, '77; Physics I, '77.
Irving, W. G., Political Science II, '94.
Jackson, Fannie, German I, '04.
Jackson, V. W., Botany I, '03; Animal Biology II, '03.
Jameson, Georgina, French I, '99; German I, '99; English I, '99.
Johns, C. P., French I, '96; German II, '96; Italian II, '96; English II, '96.
Johnson, D. B., English III, '01; History II, '01.
Johnston, J. K., Animal Biology I, '97; Botany I, '97.
Johnston, J. R., English Literature and History II, '82.
Johnston, J. W., Botany I, '94; Animal Biology II, '94.
Johnston, W. A., Latin I, '03; Greek I, '03.
Kayler, W. B., Histology II, '93.
Keillor, James, English III, '00; History I, '00.
Kellock, J. McC., English Literature I, '92; History I, '92.
Kellock, W. McC., English II, '96; Political Science II, '96.
Kemp, W., French I, '98; German I, '98; Italian I, '98; English I, '99.
Kennedy, A., Mathematics I, '01.
Kennedy, A. H., English I, '03.
Kennedy, T., Mathematics I, '99.
Kerfoot, H. W., Latin II, '00.
Keys, S. J., History III, '03.
Kidd, A., History II, '04.
Kidd, C. E., English II, '02; Political Science, II, '03.
Kilborn, O. L., Chemistry I, '87.
King, F., Mathematics I, '89.
King, W. W., Latin I, '95; Greek I, '95.
Kirkland, W. S., Botany I, '98; Biology I, '98.
Knight, C. W., Geology III, '04.
Laing, Mabelle, German III, '03; French III, '03.
Laird, Annie, L., English II, '00; French II, '01; German II, '01
Laird, D. H., Latin I, '98.
Laird, R., Latin I, '92; Greek I, '92; Philosophy I, '95.
Lang, G. R., Philosophy II, '96.
Langford, T. E., Botany I, '98; Biology II, '98.
Lavell, C. F., History I, '93; Political Science I, '94.

Lees, R., Botany I, '90; Zoology I, '90; Geology I, '90.
Left, R. M., English Literature II, '89; History I, '89; Moderns II, '89.
Lewis, L. L., French II, '99; German II, '99; Italian I, '99; English II, '00.
Leibner, E., Animal Biology III, '00; Botany I, '00.
Lindsay, C. V., History I, '99; Political Science I, '00.
Lindsay, E., History II, '96.
Linton, A. R., Classics I, '80; Philosophy I, '81.
Lockhart, T. J., Zoology I, '91.
Lochead, W. M., History I, '97; Political Science I, '98.
Logie, W. A., Greek I, '87; Latin I, '87.
Loucks. J. E., English III, '01; History II, '01.
Lowe, W. D., Latin I, '01; Greek I, '01; English I, '04.
Malcolm, G., History II, '92.
Malone, Edith, French I, '99; German I. '99; Italian I, '99; English I, '00.
Malloch, G. S., Greek II. '02; English II, '02.
Marquis, T. G., English Literature I, '91.
Marshall, J., Philosophy I, '87; English Literature I, '91.
Marshall, J. W., Latin III, '98.
Marshall, W. F., Political Science I, '98; English I, '98.
Marty, Aletta E., Moderns I, '93; English II, '94.
Marty, Sarah E., Moderns I, '96; English I, '97.
Mason, G. W., History I, '02; Political Science I, '02.
Matheson, J., Mathematics I, '01.
Matthews, S. W., Mathematics I, '97.
Meade, R., Botany I, '96; Animal Biology I, '96.
Meiklejohn, A. J., English II, '98.
Menish, Janet I., Moderns II, '95; English II, '95.
Menzies, R. D., Chemistry II, '95; Animal Biology I, '96.
Might, L., Biology I, '04; Chemistry I, '04.
Millar, J., Pol. Science I, '89; Philosophy I, '91; English I, '93.
Millar, J. M., English I, '93.
Millar, J. L., English II, '95; Political Science II, '96.
Miller, Eva M., French III, '01; German III, '01; English II, '02.
Miller, J., English Literature and History II, '86; Moderns II. '86.
Miller, J. D., English II, '96; Political Science II, '96.
Millions, Edna, French III, '99; German III, '99.
Mills, J. H., Greek I, '89; Latin I, '89.
Mills, Rhoda, Latin III, '98.
Minnes, R., Mathematics I, '89.
Misener, Geneva, Latin I, '98; Greek I, '99.
Mitchell, G. A., Philosophy II, '99.
Mitchell, G. W., Greek II, '85; Latin II, '85.
Mitchell, J. V., Mathematics III, '03.
Mitchell, S. A., Mathematics I, '94; Physics I, '95.
Moffat, W., Qualitative Analysis (only) I, '93; Zoology I, '93; Histology I, '93; Botany I, '94; Animal Biology I, '94.

Moore, J. R., Botany I, '96; Animal Biology I, '96.
Moore, Margaret B., English III, '04.
Morden, G. W., Chemistry II, '88.
Morgan, J., Animal Biology III, '00; Botany II, '00.
Morrison, A. S., History I, '97; English III, '98.
Morton, Alice, Mathematics I, '99.
Mowat, A., English III, '00.
Mowat, J. McD., English II, '94; Political Science I, '95.
Mudie, Ethel, English III, '99; History I, '99.
Munro, H. B., English III, '98; History I, '98.
Munro, Margaret, German III, '04.
Munro, Maud E., French II, '96; Italian I, '96; German II, '99; English III, '99.
Munro, P. F., Latin I, '03.
Munro, W. B., History I, '95; Political Science I, '96.
Murphy, G. B., English III, '04; Political Science I, '04.
Murphy, Isabella, English I, '01; Historv I, '01.
Murray, D. C., Animal Biology I, '00; Botany I, '00.
Murray, Minnie, Philosophy I, '94.
McCaig, J., English II, '96.
Macalister, Ursilla, Latin I, '00; English I, '00; French II, '01; German II, '01.
McCallum, A. B., Philosophy I, '80.
McCallum, J. A., English II, '00.
McCallum, S., Chemistry I, '03; Mineralogy I, '03.
McClement, W. T., Chemistry I, '87; Natural Science I, '88.
McColl, A. E., Mathematics II, '85.
McColl, J. A., English I, '94; Political Science I, '95.
McConachie, J. C., Political Science II, '02.
McConkey, Kate, German III, '03; French III, '03.
McCormack, Irene, French III, '04.
McCormack, M., French I, '01; German II, '01.
McCormack, S. G., German I, '03; French I, '03.
McCreary, R. N., Animal Biology I, '95; Botany I, '95.
McCrimmon, Annie L., French II, '02; German II, '02; English III, '02.
Macdonald, Geo., Classics I, '78; Philosophy I. '78; English Literature and History I, '78.
McDonald, J., Latin I, '92; Greek I, '92; English I, '01.
McDonald, J. F., Latin I, '99; Greek I, '00; English I, '99; Political Science I, '01.
McDonald, N., English II, '00.
McDonald, Norval, French III, '99; German II, '99.
Macdonnell, G. F., Latin I, '93; Greek I, '93.
Macdonnell, J. M., Greek I, '04.
Macdonnell, J. S., Latin I, '99; Greek I, '99.
Macdonnell, Logie M., Greek I, '02; English I, '04.
Macdougal, C. A., Latin II, '95; Greek II, '95.
McDougall, F. H., Chemistry I, '02; Mineralogy I, '03.

McDougall, J. B., Latin II, '96; Greek II, '96.
McDowall, E., History II, '96.
McEachran, J. M., Philosophy I, '02.
MacEwen, G. G., Physics I, '03.
McEwen, J. S., English II, '97.
McGaughey, G. A., History I, '99; Political Science I, '00.
McGibbon, A., Latin I, '97.
McGillivray, Alice, Chemistry I, '84.
Macgillivray, Florence, French III, '04.
McGregor, Annie K., Latin I, '04.
McGuire, J., Botany I, '01; Animal Biology I, '01.
McInnes, C. R., Physics I, '95; Mathematics I, '96.
MacInnes, W. H. E., Greek I, '02.
McIntosh, J. W., English I, '94; French I, '94; Italian I, 93; German I, '93.
McIntosh, W. D., Latin I, '92.
McKay, D. A., Animal Biology II, '00; Botany I, '03.
McKay, M., History I, '79.
McKay, R., Latin I, '81.
McKechnie, J. B., Mathematics I, '03.
McKechnie, J. H., Mathematics I, '02.
McKellar, Kate, Mathematics II, '04.
Mackenzie, Arch. A., Classics I, '77; Philosophy I, '77; English Literature and History I, '77.
Mackenzie, M., Philosophy I, '88.
McKinnon, M. A., Philosophy I, '00.
McLaren, W. W., English I, '98; Political Science I, '99.
McLean, R. A., Latin I, '04; Greek III, '03.
McLennan, Elizabeth, English II, '99.
McLennan, F. M., Mathematics I, '78.
McLeod, Lola, French III, '04; History III, '04.
McLeod, A., Political Economy I, '82.
McLeod, P. A., Political Economy I, '87; Philosophy I, '89.
McManus, Emily, English I, '93; Political Science II, '94.
McMillan, H. H., Mathematics II, '79.
McNab, G. G., Mathematics I, '02.
McNab, R. C., English II, '96; Political Science II, '96.
McNaughton, Elizabeth, Latin I, '99; Greek I, '00; English I, '01.
Macpherson, H., Political Science II, '04.
McPherson, H. G., French II, '96; Italian II, '96; German III, '97; English III, '97.
McPherson, Mary C., French III, '00; German III, '00; English II, '00.
McPherson, N., Philosophy I, '91.
McPherson, W. A., Mathematics II, '91.
McPherson, W. E., English II, '96.
MacQuarrie, W. J., English III, '03; Political Science III, '04.
McRae, A. D., Animal Biology II, '00; Botany II, '00.

McRae, Donella, French II, '00; German III, '00; Italian II, '00; English III, '00.
McRae, F. A., Political Science II, '96; English II, '97.
McRae, T. W. R., English Literature and History I, '86.
McTavish, D., Classics I, '79; Philosophy I, '81.
McVicar, J., Mineralogy II, '93; Animal Biology II, '94; Chemistry II, '96.
Neish, A. C., Chemistry II, '98; Biology II, '93.
Nesbit, D. A., English III, '00; History III, '01.
Neville, K. P. R., Latin I, '97; Greek I, '97.
Newman, G. E., English II, '94; History II, '94.
Newton, Meta, English II, '04; History I, '03.
Nichol, Jennie, Moderns II, '93; History II, '93.
Nichol, W., Chemistry I, '83; Natural Science I, '85; English Literature and History I, '86.
Nicolle, F. R., Animal Biology II, '03; Chemistry II, '03.
Nimmo, H. M., Latin II, '98; Greek I, '98.
Norris, I. T., Mathematics II, '94.
Norris, J., Mathematics I, '93.
O'Reilly, J. R., Political Economy I, '81.
O'Shea, J., English II, '92.
Parker, F. R., Greek I, '87; Latin I, '87.
Patterson, A. O., Latin I, '96; Greek I, '97.
Patterson, W. J., Mathematics I, '88; Political Economy I, '89; Philosophy I, '95.
Peacock, E. R., English I, '94; Political Science I, '94.
Peck, W. W., English I, '93; History I, '91; Political Science I, '92.
Pergan, P., History I, '92.
Petapiece, A. W., Animal Biology III, '03.
Pettit, L., English III, '03; History I, '04.
Phalen, R. M., Politcial Economy II, '89.
Philp, J. H., Philosophy I, '03.
Pierce, Ada E., English III, '04; History I, '04.
Pitts, F., Philosophy II, '97.
Playfair, A. W., Greek I, '95; Latin I, '96.
Polson, S. M., English I, '04.
Porter, S. E., Animal Biology II, '96.
Polson, Susan C., English I, '95; History I, '96.
Pope, F. J., Chemistry I, '90; Zoology I, '91.
Powell, G. L., English III, '97.
Power, J. F., Botany I, '96; Animal Biology I, '96.
Power, J. J., History II, '00.
Quigley, J. P., Latin I, '03; Greek I, '03.
Race, W. B., French II, '03; English II, '03.
Ramsay, W., Latin I, '02; Greek II, '02.
Reid, Etta A., Mathematics I, '92.
Reid, G. M., French III, '99; English III, '98; German III, '99; Italian III, '99.

Reid, M. R., Botany I, '97; Animal Biology I, '97.
Reynolds, M., Animal Biology III, '02.
Robertson, A. M., Mathematics I, '96; Moderns I, '96.
Robertson, J. B., French II, '03; English III, '03; History III, '03.
Robertson, M. S., Moderns I, '80.
Rogers, C. S. G., Latin I, '00; Greek I, '01.
Rogers, J. E., English I, '95.
Rogers, W. C., Mineralogy I, '98.
Rose, G. W., Philosophy II, '98.
Ross, A. H. D., Mathematics II, '88; Chemistry I, '93; Zoology II, '93; Histology I, '93.
Ross, A. E., Latin II, '93; Greek I, '93; Sanscrit I, '93.
Row, R. K., Animal Biology II, '97; Botany I, '97.
Russell, W. J., Latin III, 00; Greek III, '00.
Ruttan, Emily, Mathematics II, '02.
Ryckman, F. F., English III, '98; History II, '98.
Ryerson, S. E., Mathematics I, '95.
Saunders, Elsie E., French I, '04.
Saunders, W. J., Botany I, '99; Biology I, '99.
Scott, C. A., Chemistry I, '85; Natural Science II, '85.
Sexsmith, M. E., History II, '02; Political Science III, '02.
Sexton, J. H., Botany I, '98; Biology I, '98.
Shannon, L. W., Chemistry I, '80.
Sharp, J., Political Economy I, '88: Philosophy II, '88; English I, '92.
Shaw, Lily, German II, '03; French III, '03.
Sheppard, F. W., Latin I, '02.
Shibley, G. R., Latin I, '01; Greek I' '01; English II, '02.
Shibley, H. T., Political Economy I, '80; History I, '82.
Shibley, Jennie, English III, '00.
Shibley, L., History I, '90.
Shorey, E. C., Chemistry I, '86; Natural Science I, '86.
Shortell, D. H., English I, '98; History I, '98.
Shortt, A., Philosophy I, '83.
Shortt, J. S., Latin II, '94; Greek I, '94; Political Science I, '97.
Shortt, E. J., Latin I, '96.
Sills, W. R., Mathematics I, '95.
Simpson, B. L., Mathematics I, '04.
Sinclair, E., English III, '97.
Sinclair, J., Political Economy I, '89.
Sinclair, J. A., Philosophy I, '90; Political Science I, '92.
Skelton, O., Latin I, '99; English I, '99; Greek I, '00.
Slack, E. B., Chemistry I, '04.
Smellie, J. F., History II, '90.
Smirle, Harriette, English I, '02; History I, '03.
Smith, A. L., Greek I, '81; Latin I, '82; English Literature and History I, '83.
Smith, J. C., Latin I, '98; Greek II, '98.
Smith, J. H., Geology I, '92.

Smith, F. C., Animal Biology III, '97; Botany I, '97.
Smith, V. B., English II, '95; Italian II, '96; French III, '97; German III, '97.
Smythe, G. H., Latin III, '97; Greek II, '97.
Snell, J., Mathematics I, '90.
Snyder, H. Adell, English I, '94; History I, '97.
Solandt, D. M., Political Science I, '99.
Spooner, A. C., Moderns II, '96; English III, '96.
Stanley, J. N., Mathematics I, '01.
Staples, L. E., Geology I, '95.
Stewart, E. J., Greek II, '97.
Stewart, J., Philosophy I, '94.
Stewart, J. A., Mathematics I, '92.
Stewart, J. R., Animal Biology II, '03.
Stewart, W., Mathematics I, '79.
Story, Selina G., English I, '00; French I, '01; German I, '01; Italian I, '01.
Stratton, C. M., Chemistry II, '98; Botany II, '99.
Stubbs, S. J., English II, '99.
Tandy, H., French I, '00; German II, '00; Italian I, '00; English III, '00.
Tandy, W. R., English I, '99; Philosophy I, '00.
Taylor, J. A., Botany II, '97; Animal Biology II, '97.
Teskey, Kathleen, German I, '04; French I, '03; English II, '04.
Thompson, A. M., Latin I, '01; Greek I, '02.
Thompson, A. M., Latin I, '01.
Thompson, Edna G., German III, '03; French III, '03.
Thompson, Margaret J., French II, '93; Italian I, '93; German II, '94; English II, '94.
Thompson, P. .M,. Botany I, '98; Biology I, '98.
Thompson, T. J., Philosophy I, '92; English I, '95.
Tompkins, Louise H., French II, '04; English III, '04.
Truscott, S. A., Mathematics I, '04.
Turnbull, J. H., Philosophy I, '96.
Tyner, W. G., Chemistry II, '98; Biology III, '98.
Vaux, Lilian, English I, '02; Political Science I, '03.
Voaden, J., Botany I, '02; Animal Biology I, '02.
Volume, D. A., Political Science I, '97; History II, '98.
Walker, T. L., Chemistry I, '89; Botany II, '89.
Walks, R. H., English III. '00.
Wallace, J., Latin I, '97; Greek I, '98; Philosophy I, '03.
Warren, F. R. W., Latin II, '00; Greek I, '01.
Warren, L. A. H., Mathematics I, '02.
Watson, E. C., Latin I, '95; Greek I, '95.
Weese, Metta, German II, '03; French, II, '03.
Wells, E. J., Botany I, '03; Animal Biology I, '03.
Whinton, W. E. ., Biology I, '04.
White, J. W., Chemistry II, '88.
Whiting, C. C., Philosophy I, '02.

Williams, Mary I., German II, '04; French II, '04.
Williams, W. H., French I, '02; German I, '02; Italian I, '02; English II, '03.
Williamson, A. R. B., Chemistry I, '96; Animal Biology I, '96.
Williamson, E. J.; Italian I, '99; French I, '99; German I, '99; English I, '00.
Wilson, Annie J., English III, '04.
Wilson, C. L. M., History II, '91; Moderns II, '91.
Wilson, H. L., Greek I, '88; Latin I, '88.
Wilson, R. A., English II, '01; Philosophy I, '02.
Windell, H. C., Latin I, '95; Greek I, '96.
Wood, I., Chemistry I, '91; Zoology I, '91.
Wright, J. J., Political Economy I, '87.
Young, J., English Literature and History I, '81.
Young, W., Animal Biology II, '95; Botany I, '95.
Youngson, Mary A., Botany III, '98.

Explanations of the Numbers Attached to the Names in the following List.

PREVIOUS TO 1892.

1. Gold Medallist in Classics.
2. Silver Medallist in Classics.
3. Gold Medallist in Mathematics.
4. Gold Medallist in Philosophy.
5. Gold Medallist in History and English Literature.
6. Gold Medallist in Political Economy.
7. Silver Medallist in Political Economy.
8. Gold Medallist in Chemistry.
9. Silver Medallist in Chemistry.
10. Silver Medallist in Modern Languages.
11. Silver Medallist in Natural Science.

1892 AND AFTERWARDS.

1. University Medallist in Latin.
2. " " Greek.
3*a*. " " German. } from 1903.
3*b*. " " French. }
4. " " English.
5. " " History.
6. " " Philosophy.
7. " " Political Science.
8. " " Mathematics.
9. " " Chemistry.
10. " " Physics.
11*a*. " " Botany. } from 1903.
11*b*. " " Animal Biology. }
20. " " Geology.
28. " " Mineralogy.

12. Prince of Wales' Prize.
13. Governor General's Prize.
14. Gowan Prize; Botany.
15. Macpherson Prize.
16. Thornburn Prize.
17. Lewis Prize.
18. Latin Composition Prize.
19. Greek Composition Prize.
22. Maclennan Prize.
23. Carmichael Prize.
24. Chancellor's Prize.
25. Gowan Prize; Political Science.
26. Hague Prize.
27. English Verse Prize.

NOTE.—The University Medal is now the highest award in honours. Candidates must take all the honour papers in the work of the courses selected and no medal is awarded to any candidate who fails to obtain three-fourths of the whole number of marks.

LIST OF GRADUATES.

Graduates are requested to intimate to the Registrar, change of residence or any omission in the list.

Names marked with an asterisk are names of clergymen.

Name.	Date of Graduation.	Address.
Abbott, George A., M.D.	1895	Fort George, Iowa.
Abbott, Rodney H., M.D.	1879	Kingston.
Abbott, Samuel A., M.D.	1868	(Deceased).
Aberdeen, His Excellency the Earl of, LL.D.	1894	London, Eng.
Aberdeen, Her Excellency the Countess of, LL.D.	1897	London, Eng.
*Acheson, Stuart, B.A.	1887	Wiarton.
Adams, George T. C., M.D.	1892	Melbourne, Victoria.
Adams, Joseph, M.D.	1892	Michigan.
Adamson, Herbert A., M.D.	1892	Richmond, Utah, U.S.
Agnew, Andrew, B.A.	1865	
Agnew, John, B.A., 1859; M.A., 1872; M.D.	1865	(Deceased).
Aikin, J. A., M.A.	1904	Toronto.
Alcombrack, R. W., B.A.	1895	44 Pine St., New York.
Alexander, Francis R., M.D.	1881	(Deceased).
Alexander, James A., M.D.	1869	Deceased).
Allan, Laura E., B.A.	1899	Marlbank.
Allen, Alfred G., M.D.	1887	Deadwood, S. Dakota.
Allen, James R., M.D.	1894	Olean, N.Y.
8Allen, John, M.A.	1904	Napanee.
Allen, Maggie D. (Hutcheon), M.A.	1895	Ottawa.
14, 8Allen, Thos. G., B.A., 1888; M.D.	1889	Chicago.
Allen, Emily, B.A.	1898	Kingston.
Allison, D., (President of Univ. of Mt. Allison College), LL.D.	1903	Sackville, N.B.
Allison, D. M., M.D.	1900	Adolphustown.
Allison, Mary L., B.A.	1902	Adolphustown.
Alway, Enoch, M.D.	1869	Bartonville.
Ames, James A., M.D.	1895	Rush, N.Y.
Ami, Henry M., M.A., D.Sc.	1892	Ottawa.
Amos, W. W., M.D.	1902	Kingston.
Amys, C. H., M.D.	1899	Lakefield.
Anderson, F. C., B.A.	1900	Cobourg.
Anderson, James J., M.D.	1887	Smith's Falls.
Anderson, P. M., M.A.	1903	Belleville.

Name.	Date of Graduation.	Address.
Anderson, M. W., M.D.	1888	Lumsden, N.W.T.
Anderson, William J., M.D.	1894	Easton's Corners.
Anderson, William J., M.D.	1861	Smith's Falls.
Andrews, D., M.A.	1904	West Lorne.
Andrews, Francis, D.D.	1901	(Deceased).
Anglin, Francis R., B.A.	1895	Kingston.
Anglin, Harriet, B.A.	1901	Kingston.
Anglin, Robert W., M.A.	1897	Essex.
Anglin, James V., B.A., 1883; M.D.	1887	Montreal.
Anglin, Robert S., M.D.	1882	Omaha, Neb.
Anglin, Samuel, B.A.	1905	Battersea.
Anglin, Sarah E.,(Sparling) B.A.	1892	Montreal.
Anglin, William G., M.D., (Professor Queen's University	1883	Kingston.
Anning, N. H., B.A.	1905	Oxmead.
Anson - Cartwright, R. H. M., B.Sc.	1904	Belleville.
6, *Anthony, James, M.A.	1898	Waterdown.
Archibald, G. G., B.A.	1903	Truro, N.S.
Argyle, His Grace the Duke of, LL.D.	1879	Inverary Castle, Scotland.
Armour, James, B.A.	1886	Perth.
Armstrong, Albert, M.D.	1867	Arnprior.
Armstrong, Alfred, M.D.	1886	(Deceased).
Armstrong, C. C., M.D.	1898	Deseronto.
Arthur, Colin C., M.A.	1891	Cobourg.
Arthur, S. W., B.A., 1900; M.D.	1903	Inverary.
Ash, A. F., M.D.	1901	Kingston.
Ashton, John J., B.A.	1886	Newcastle.
Asselstine, David P., B.A.	1892	Kingston.
Asselstine, Elizabeth C., B.A., 1904; M.A.	1905	Kingston.
Asselstine, E. B., B.A., 1904; M.A.	1905	Wilton.
Asselstine, Henry A., B.A.	1876	
Asselstine, Robert W., B.A.	1894	Carleton Place.
14Attwood, Albert E., M.A.	1896	Ottawa.
Austin, Griffin H., M.D.	1893	Cairo, N. Y.
*Awde, James, B.A.	1879	Niagara Falls.
11*a*Ayers, M. H., M.A.	1903	Beamsville.
Aykroyd, W. H., M.D.	1903	Railton.
Aylesworth, Archibald K., M.D.	1863	(Deceased.)
Aylesworth, F. A., M.D.	1903	Bath.
Aylesworth, F. L., B.A.	1902	Kingston.
Aylesworth, Mabel E., B.A.	1904	Bath.

Name.	Date of Graduation.	Address.
Bailey, R. W., M.D.	1904	Kingston, Jamaica.
Bailey, W. L., M.A.	1904	Gravenhurst.
Bailie, Thomas H., M.D.	1892	
Bain, Angus U., B.A.	1888	C.P.R. offices, Toronto
12Bain, Hugh U., B.A., M.D.	1871	(Deceased.)
Bain, Hon. Mr. Justice J. F., B.A.	1867	Winnipeg.
*Bain, William, B.A., 1845; M.A., 1847; D.D.	1872	(Deceased.)
Bain, William G., B.A.	1886	(Deceased.)
Bain, William R., B.A.	1863	
Bajus, Carrie, B.A.	1901	Kingston.
Baker, C. W., B.Sc.	1905	Kingston.
Baker, Hat. M., (Thompson) M.A.	1892	(Deceased.)
Baker, H. S., B.Sc.	1902	Kingston.
Baker, Herbert W., B.A.	1891	Portage la Prairie.
Baker, J. C., B.Sc.	1903	Surveyor, Dep't of Indian Affairs.
Baker, J. Y., B.A., 1896; M.D.	1899	Dalhousie Mills.
20Baker, M. B., B.A., 1900; B.Sc.	1902	Stratford.
Baker, Thomas C., M.D.	1888	Chatham.
Baker, William C., M.A.	1895	Kingston.
Baker, James G., B.A.	1897	Summerstown.
Balfe, T. H., M.D.	1882	Hamilton.
Ballagh, James H., B.A.	1878	Chicago.
Bamforth, Richard, B.A.	1897	Rednersville.
Bannister, Percy G., M.D.	1897	Edinburg, Scotland.
Bannister, J. A., B.A.	1898	Kingston.
Barber, Albert E., M.D.	1892	South Bend, Ind.
Barber, Vincent, M.D.	1897	Brooklyn, N.Y.
Barclay, William B. C., B.A.	1888	Arnprior.
Barker, Alexander N., M.D.	1893	(Deceased.)
Barnard, A. T., B.A.	1899	Hamilton.
Barnet, T. J., M.D.	1900	(Deceased.)
Barr, Janet, B.A.	1900	North Bay H. S.
Barrett, H. M., B.A.	1903	Windsor.
Bateman, Francis J., B.A.	1888	Christiana.
Bateman, G. C., B.Sc.	1905	Kingston.
*6Bates, C. J. L., M.A.	1901	Tokio, Japan.
*Baxter, John C., D.D.	1878	Kirkaldy, Scotland.
*Bayne, James, D.D.	1865	(Deceased.)
10Beall, Arthur W., B.A., 1888; M.A.	1892	Peterboro.
Beaman, W. C., M.D.	1886	
5Beaton, Alexander H., B.A.	1894	Toronto.
Beaton, Kate F., B.A., (Mrs. H. Nimmo)	1897	Detroit, Mich.
Beattie, John A., B.A.	1891	

Name.	Date of Graduation.	Address.
Beattie, William, M.D.	1866	Wiarton.
Beatty, Elizabeth R., M.D.	1884	Brantford.
Beachard, David, M.D.	1887	Tecumseh.
Beckett, James, M.D.	1863	(Deceased.)
25Beckett, S. E. J., B.A., 1903; M.A.	1905	Kintail.
*Beckstedt, I. N., B.A.	1899	Toledo, Ont.
Beeman, Truman A., M.D.	1887	Mallorytown.
Beeman, Thomas W., M.D.	1878	Perth.
Beeman, William C., M.D.	1886	Ottawa.
Begg, Colin L., B.A.	1895	Orillia.
Begg, John W., M.D.	1888	Cartego, Costo Rico.
Begg, William P., M.A., D.D.	1896	Messina Springs.
Belch, John A., M.D.	1889	Syracuse, N.Y.
Belfour, P. F., B.A.	1899	Bath.
Bell, Alexander, M.D.	1865	Lakefield.
Bell, Andrew, B.A.	1853	Almonte.
Bell, F. C., B.A.	1905	Winnipeg, Man.
Bell, F. M., M.D.	1903	Kingston.
*Bell, George, B.A., 1845; LL.D.	1872	(Deceased.)
Bell, George, B.A.	1878	Toronto.
Bell, James M., M.D.	1857	(Deceased.)
9Bell, J. M., M.A.	1899	New Zealand.
Bell, John, B.A., 1862; M.A., 1865; M.D.	1866	(Deceased.)
*Bell, John, B.A.	1890	(Deceased.)
Bell, John H., M.D.	1890	Kingston.
Bell, Josiah, B.A., 1864; M.A.	1877	Toronto.
Bell, Robt., LL.D., Assist. Direc. Geological Survey of Can.).	1883	Ottawa.
*Bell, William, B.A.	1855	(Deceased.)
Bellamy, A. W., M.D.	1897	Irondoquoit, N.Y.
Bellamy, Mabel, B.A.	1901	Prescott.
*Bellis, George, D.D.	1880	(Deceased.)
Belton, W. J., M.D.	1892	(Deceased.)
*Bennett, Orr, B.A.	1886	Almonte.
Bennett, Charles V., B.A.	1894	Barrie.
Bennett, Henry, M.D.	1878	(Deceased.)
*Bennett, J. W. C., B.A.	1897	Bracondale.
Bennett, W. L., B.A.	1903	Port Hope.
Bennett, W. H., B.A.	1901	Berthier-en-haut, Que.
Benson, J. R., B.A., 1853; M.D.	1858	(Deceased.)
*Bergne, Samuel B., D.D.	1865	London, Eng.
Berlanquet, Hugh S., B.A.	1886	Admaston.
Bermingham, Mary E., (Macarow) M.D.	1882	Kingston.
Bermingham, F. H., M.D.	1892	New York, N.Y.

Name.	Date of Graduation.	Address.
Bernard, Gerald, M.D.	1871	Newcastle-on-Tyne, England.
Bernstein, J. S., M.A.	1898	New York City.
Berry, George H., M.D.	1895	Westport.
Bertram, Thomas A., M.D.	1885	Dundas.
Best, Isabel M., B.A.	1901	Peterboro.
Bethune, Alexander, M.D.	1858	Seaforth.
Bethune, Harry F., M.D.	1869	Clanbrassie.
Bethune, William, B.A.	1864	
Betts, Alfred H., M.D.	1875	(Deceased.)
Betts, John H., M.D.	1881	(Deceased.)
Beveridge, Alice B., (Porteous) B.A.	1892	Jersey City.
Beveridge, R. W., B.A.	1905	Port Elmsley.
Bice, Mark, M.D.	1869	Mount Brydges.
Biggar, George W., M.D.	1862	Grimsby.
Bigham, Hugh, M.D.	1864	(Deceased.)
Bigham, James, M.D.	1868	Peterboro.
Bigham, John, M.D.	1865	(Deceased.)
Billings, T. H., M.A.	1902	Lyn, Ont.
Bilton, William J., M.D.	1892	(Deceased.)
*Binnie, James, B.A., 1889; M.A., 1890; B.D.	1892	Tweed.
Birch, BeatriceD., B.A.	1904	Kingston.
Bird, Francis W., M.D.	1859	(Deceased.)
Bird, Nelson J., M.D.	1860	San Francisco, Cal.
Birkett, F. W., M.D.	1898	Ottawa.
Bishop, C. P., B.A.	1900	Athens H. S.
Bissonnette, Julian D., B.A., 1880; M.D.	1892	Stirling.
*Black, Armstrong, D.D.	1900	Toronto.
Black, Benjamin F., M.D.	1893	
Black, B. S., B.A.	1904	Kingston.
Black, Jean B., B.A.	1904	Hamilton.
Black, H. H., B.A., 1898; M.A.	1899	Kingston.
*Black, John, D.D.	1876	(Deceased.)
Black, John A., B.A.	1891	Massie.
3bBlack, Norman F., M.A.	1905	Springfield.
Black, William A., M.D.	1862	(Deceased.)
Blakeley, Robert, M.D.	1861	(Deceased.)
Bland, Rev. Salem (Professor of Wesley College), D.D.	1903	Winnipeg, Man.
Blaylock, Ella, M.D. (Atherton).	1887	Nashua, New Hamp.
Bleasdell, Charles E., M.D.	1868	(Deceased.)
Bleecker, G. H., M.D.	1902	Trenton.
Bloor, W. R., M.A.	1902	Ingersoll.
Boddy, Martha, B.A.	1894	Owen Sound.

Name.	Date of Graduation.	Address.
Bogart, I. G., M.D.	1901	Kingston.
Bogart, J. L. H., B.Sc.	1903	Militia Dept. Ottawa.
Boland, W. A., M.A.	1905	Killaloe Station.
20, 28Bolton, L. L., M.A.	1903	Portland.
Bonner, John, B.A., 1845; M.A.	1847	(Deceased.)
Booth, Donald B., M.D.	1868	(Deceased.)
Borden, Robert L., K.C., M.P., LL.D.	1903	Halifax, N.S.
Bothwell, A. M., M.A.	1905	Perth.
*Borley, H. D., B.A.	1903	
Boucher, Joseph A., M.D.	1894	Watertown, Mass.
Bouchier, H. P., B.A.	1853	(Deceased.)
Bourinot, John G., LL.D.	1887	(Deceased.)
Bourns, Thomas C., M.D.	1892	Whitney.
Bourns, William H., M.D.	1892	Adison.
Bovey, Henry T., M.A., LL.D., (Prof., McGill University).	1893	Montreal.
Bowen, George H., M.D.	1887	Gananoque.
Bowen, Robert, M.D.	1865	H. M. Service.
Bowerman, John T., M.A.	1891	Ottawa.
Bowers, Samuel S., M.D.	1857	Fond du Lac, Wis.
Bowie, H. A., M.D.	1901	
Boyd, Agnes M., B.A.	1904	Kingston.
Boyd, Annie A., B.A., 1897; M.A.	1898	Kingston.
Boyd, Edward, LL.B.	1863	
*Boyd, John D., B.A.	1889	Kingston.
Boyd, M. E., B.A.	1898	Kingston.
Boyle, Arthur A., M.D.	1859	Toronto.
Boyle, Joseph, B.A., 1891; M.D.	1896	Casselman.
*Boyle, W. H. W., B.A.	1884	Minneapolis.
Bradley, Gordon F., B.A.	1890	
Brady, James, M.D.	1891	Rochester, N.Y.
Brandon, J. S., B.A.	1899	Trail, B.C.
Brandon, W. M., B.A.	1899	Ancaster.
Branigan, P. K., M.D.	1862	(Deceased.)
Branscombe, M. E., B.A., 1903; M.D.	1904	Picton.
Bray, John L., M.D., 1863; LL.D.	1905	Chatham, O.
Breuls, I. D., B.A.	1900	North Bay.
Brick, N. W., B.A.	1903	Kingston.
12Briden, William, B.A.	1880	Ingersoll.
Bridge, B. B., M.D.	1900	Albert City, Iowa.
Bridgeland, Samuel, M.D.	1870	Bracebridge.
Brien, James, M.D.	1872	Essex Centre.
Bright, A., B.A.	1905	Montreal, Que.
25Brisco, N. A., B.A., 1898; M.A.	1900	Napanee.
Britton, A. H., B.A.	1903	Toronto.

Name.	Date of Graduation.	Address.
Britton, Edward H., B.A.	1884	Kingston.
Britton, Mildred G., (Brock) B.A	1899	Kingston.
28Brock, Reginald W., (Acting Professor, School of Mining), M.A.	1895	Geol. Dept., Ottawa.
Brokenshire, W. H., B.A.	1902	Port Dalhousie.
Brough, Thomas A., B.A.	1893	Kamloops, B.C.
Brown, Albert H., B.A.	1896	Ottawa.
Brown, Amelia, B.A.	1898	Kingston.
Brown, Frederick M., B.A.	1890	Kingston.
Brown, G. A., B.A.	1904	Oak Grove.
Brown, George E. J., LL.B.	1894	Creemore.
Brown, Jonathan, M.D.	1893	New Lothrop, Mich.
*Brown, James A., B.A.	1883	Agincourt.
5, 22Brown, J. C., B.A., 1894; M.A	1896	Williamstown.
Brown, J. G. Williston, B.A.	1890	Charlottetown, P.E.I.
Brown, J. W., B.A.	1901	Hanover.
Brown, Marshall J., M.D.	1856	Kingston.
Brown, Sara A., M.D.	1890	
Brown, T., B.Sc.	1904	Hawkesbury.
*6Brown, T. C., B.A., 1903; M.A.	1904	Richmond.
Brown, W. C., M.D.	1904	Bellview.
Brown, William G., B.A.	1881	
Brown, W. T., B.A.	1901	
Bruce, Frederick, M.D.	1886	Mount Morris, Mich.
*Bryan, Andrew C., B.D.	1895	
Bryan, George J., B.A.	1888	Regina, Assa.
Bryan, Hugh W., B.A., 1893; M.A.	1894	Brockville.
Bryant, J. F., B.A.	1901	Prince Albert, N.W.T.
Bryce, Walter, B.A.	1896	Toronto.
1Brydon, R., B.A.	1903	Oustic.
Brymner, Douglas, LL.D.	1892	(Deceased.)
Bryson, Isabel S., B.A.	1905	Ottawa.
Bryson, Mary G., B.A.	1899	Ottawa.
Buchanan, H. M., M.D.	1889	St. Lawrence, N.Y.
*Buchanan, John H., B.A. (Medical Missionary)	1885	Amkhut, India.
Buchanan, Mabel A., B.A.	1904	Lanark.
Buckley, Patrick D., LL.B.	1863	(Deceased.)
Bullis, William H., M.D.	1884	Rochester, N.Y.
Burdett, Harry E., M.D.	1886	St. Paul, Minn.
Burger, C. H., M.D.	1898	Kingston, Jamaica.
Burgess, H. H., B.A.	1899	Owen Sound.
Burgess, Jas. E., B.A., 1868; M.A.	1876	London.
Burns, Clement B., B.A.	1890	Ottawa.
*Burns, James C., D.D.	1884	(Deceased.)

Name.	Date of Graduation.	Address.
*Burns, Samuel S., B.A.	1894	Stirling.
15Burns, William, B.A.	1886	Vancouver, B.C.
Burr, Lenne G., B.A.	1903	Ameliasburg.
20, 28Burrows, A. G., M.A., 1900; B.Sc.	1902	Napanee.
Burrows, John G., M.D.	1891	Marlbank.
*4, 6Burton, Robert, M.A.	1898	(Deceased.)
Burton, S., M.D.	1900	Redfield, Oswego Co., N.Y.
*Burwash, N. (Chancellor of Victoria University) LL.D.	1903	Toronto.
Butler, Tobias J., M.D.	1895	34 Thorp St., Chicago
Byers, Robert P., B.A.	1893	Avoca, Que.
*Byrnes, J. D., B.A., 1898; B.D.	1901	Gore Bay.
Byrnes, Marie, B.A.	1903	Cumberland.
*Caie, George J., B.A.	1861	Forfar, Scotland.
Cairns, D.D., B.Sc.	1905	Columbia, B.C.
Caldwell, Daisy, B.A.	1901	Sydenham.
*Caldwell, J. A., B.A.	1902	Watson's Corners.
Caldwell, J. S., B.A.	1904	Watson's Corners.
Caldwell, Maxwell, B.A.	1904	Lanark.
Caldwell, William C., B.A.	1866	(Deceased.)
2Calhoun, A., M.A.	1902	Winnipeg.
Callfas, W. F., M.D.	1898	St. Louis, Mo.
Calvin, D. D., B.A.	1902	Kingston.
Calvin, J. D., B.A.	1904	Kingston.
Calvin, Marion, B.A.	1901	Kingston.
Camelon, Thomas P., M.D.	1890	Chicago.
Cameron, Alexander D., M.D.	1882	(Deceased.)
Cameron, A. E., B.A.	1903	Wemyss.
Cameron, A. R., B.A.	1903	Morrisburg.
Cameron, C. Alice, B.A.	1888	Boston, Mass.
*Cameron, Charles I., B.A., 1861; M.A.	1868	(Deceased.)
1*Cameron, Charles J., B.A., 1886; M.A.	1887	Philadelphia, Pa.
Cameron, Dan, M.D.	1887	(Deceased.)
Cameron, D. R., M.A.	1905	Lancaster.
*Cameron, Hugh, B.A.	1876	Morrisburg.
Cameron, James C., B.A., 1888; LL.B.	1896	Cornwall.
Cameron, John, B.A.	1864	
*Cameron, James Y., M.A.	1865	(Deceased.)
Cameron, Wm. A., B.A., 1887; M.D.	1890	
Cameron, Jessie, B.A.	1897	Almonte.
Campbell, Agnes L., B.A.	1898	Vancouver, B.C.

Name.	Date of Graduation.	Address.
Campbell, Albert L., M.D.	1889	Mount Amherst, Ohio
*Campbell, Alexander, B.A.	1862	Stonewall, Man.
*Campbell, Alexander J., D.D.	1887	Geelong, Aus.
Campbell, Annie G., (Macgillivray) B.A.	1891	Kingston.
*Campbell, Colin D., B.A.	1896	New Denver, B.C.
Campbell, Daniel, B.A.	1904	Eganville.
Campbell, Donald, B.A.	1850	(Deceased.)
Campbell, George, M.D.	1859	H. M. Navy.
*Campbell, George D., B.A.	1895	Chalk River.
Campbell, J. A., B.A.	1900	Keene.
Campbell, James W., M.D., Professor, Queen's University	1891	Kingston.
*Campbell, John, B.A., 1847; M.A	1850	(Deceased.)
*Campbell, John, (Acting-Principal, Presbyterian College), D.D.	1903	(Deceased.)
Campbell, J. Fraser, D.D.	1897	
Campbell, John H., M.D.	1856	(Deceased.)
Campbell, Joseph, M.D.	1867	Ontario, N.Y.
Campbell, Joseph S., M.D.	1890	Ontario, N.Y.
Campbell, Lizzie V., B.A.	1899	Smith's Falls.
*Campbell, Neil, B.A.	1883	Oso Station.
Campbell, Peter McG., B.A., 1892; M.D.	1896	Cardston, N.W.T.
*Campbell, Robert, B.A., 1856; M.A., 1858; D.D.	1887	Montreal.
*Campbell, Robert, B.A., 1867; M.A., 1870; D.Sc.	1884	Perth.
*Campbell, J. Fraser, D.D.	1897	Rutlam, Cen. India.
Carey, N., M.D.	1903	Kingston.
Carefoot, G. A., B.A.	1904	Newmarket.
Carmichael, Andrew, M.D.	1861	Sundridge.
*6Carmichael, Harvey, M.A.	1897	Spencerville.
*Carmichael, James, D.D.	1892	King, Strange.
Carmichael, James F., B.A.	1887	
2Carmichael, Norman R., (Prof., Queen's University) M.A.	1890	Kingston.
Carmichael, R. F., B.A., 1900; M.D.	1900	(Deceased.)
Carr-Harris, F. F., M.D.	1901	Kingston.
Carruthers, J. S., M.D.	1904	New Glasgow, N.S.
Cartwright, Alexander D., B.A.	1885	Toronto.
Cartwright, Richard C., M.D.	1884	Rochester, N.Y.
Carscallen, Allen B., M.D.	1875	Enterprise.
Carscallen, W. E., M.D.	1897	Tamworth.
Cartwright, C. T., B.Sc.	1905	Vancouver, B.C.

Name.	Date of Graduation.	Address.
Caskey, J. C., M.D.	1904	Tweed.
Carswell, Jennie, B.A.	1896	Renfrew.
Case, George H., M.D.	1876	(Deceased.)
Casselman, Joseph, M.D.	1886	
Cathro, Eizabeth D., B.A.	1905	Lindsay.
*Cattanach, James, B.A.	1889	
Cattanach, Jessie S., B.A.	1904	Williamstown.
*Cattanach, John C., B.A., 1868; M.A.	1881	(Deceased.)
*Caven, William, D.D., (Principal Knox College)	1875	(Deceased.)
Cavers, T. W., B.Sc.	1904	Canada Smelting Works, Trail, B.C.
Chaffey, Ellsworth, M.D.	1871	Santa Monica, Cal.
Chamberlain, T. F., M.D., Insp. Prisons	1862	Toronto.
Chamberlain, Watson P., M.D.	1888	Toronto.
Chambers, Alice, B.A.	1888	Los Angeles, Cal.
Chambers, Daniel, M.D.	1855	(Deceased.)
6Chambers, L. P., M.A.	1905	Woodstock.
Chambers, Mary M.,(Lavell) B.A	1891	Smith's Falls.
*Chambers, Robt., B.A., 1866; D.D	1897	Bardezag, Ismidt, Turkey in Asia.
Chambers, R., jr., M.A.	1902	Bardezag, Ismidt, Turkey in Asia.
Chambers, William, B.A.	1883	Los Angeles, Cal.
Channonhouse, John, M.D.	1863	Eganville.
Channonhouse, R. C., M.D.	1889	Richmond.
Channonhouse, Thomas, M.D.	1860	(Deceased.)
Chapman, A. B., M.D.	1899	Reston, Man.
Chapman, Edward J., LL.D.	1867	(Deceased.)
*Childerhose, Stephen, B.A.	1884	Parry Sound, Ont.
Chisholm, James, B.A., LL.D.	1892	Hamilton.
*Chisholm, John, B.A.	1878	Kemptville.
Chisholm, Harvey F., M.D.	1857	(Deceased.)
11Chisholm, William I., M.A.	1894	Kincardine.
Chown, Albert P., M.D.	1890	Kingston.
Chown, Henry H., M.D., (Dean of Medical Faculty, University of Manitoba) 1880; LL.D.	1903	Winnipeg, Man.
Chown, George Y., B.A., (Registrar, Queen's University)	1884	Kingston.
Chown, Stanley T., B.A.	1889	Rentrew.
Chrysler, Francis H., B.A.	1866	Ottawa.
Clancey, Charles C., M.D.	1883	Port Huron, Mich.
3*b*Clark, Grace, M.A.	1904	London.
Clark, John K., B.A.	1895	Franklin, Man.

Name.	Date of Graduation.	Address.
Clark, Richard J., M.A.	1895	Nelson, B.C.
*Clark, Wm., (Professor, Trinity Univ.), M.A., D.C.L., D.D.	1902	Toronto.
Clark, W. C. D., M.D.	1885	Toronto.
Clark, William T., B.A.	1895	Morrissey, B.C.
Clarke, G. W., B.A., 1898; M.A.	1899	Grand Forks, B.C.
Clarke, H. J., B.A.	1905	Belleville.
Clarke, James, M.D.	1868	Bay City, Mich.
Clarke, John, M.D.	1872	(Deceased.)
Clarke, Joseph A., M.A.	1882	(Deceased.)
Clarke, John G., M.D.	1880	Meaford.
Clarke, J. T. A., B.A.	1899	Lander, Man.
Clark, L. J., B.A.	1898	Harbord St. C. I., Toronto.
Clarke, William, M.D.	1879	Ireland.
*Clarke, William C., B.A.	1855	(Deceased.)
Clark, Hon. Wm. Mortimer, (Lieutenant-Governor of Ontario) LL.D.	1903	Toronto.
Claxton, George, B.A.	1876	Gladstone, Man.
*Claxton, John A., B.A., 1878; B.D.	1886	Cochrane, Alta.
Claxton, William, M.D.	1874	Verona.
Cleary, J. R. S., B.A.	1900	
Cleaver, [illegible] C., M.A.	1879	
Cleaver, William F., M.D.	1879	Wigan, England.
Clerihew, Ernest M., M.D.	1890	New York.
Clinton, George, M.D.	1878	Belleville.
Cloney, S. Louise, M.A.	1897	St. Catharines.
Clothier, J. O., B.A.	1900	Hawkesbury H. S.
Cloutier, Felix, M.D.	1889	Crysler.
Cluness, Wm. R., B.A., '55; M.D.	1859	
Clyde, William, B.A., 1885; M.A.	1887	Petrolea.
Coad, Edith, B.A.	1902	Brockville.
Cochrane, James B., B.A.	1891	Kingston.
Cochrane, Rt. Hon., 12th Earl of Dundonald, LL.D.	1904	
Cody, Rev. H. J., (Professor, Wycliffe College) D.D.	1903	Toronto.
Cogan, Jeremiah R., M.D.	1861	(Deceased.)
Coleman, William F., M.D.	1863	163 State St., Chicago
Collier, W. H., B.A.	1898	
Collins, Cornelius, M.D.	1886	(Deceased.)
Collins, E. A., B.Sc.	1905	Copper Cliff.
9Collinson, J. C., M.A.	1898	Kingston.
Collison, G. W., M.D.	1898	Brinston's Corners.
Comer, Alexander T., M.D.	1864	New York.

Name.	Date of Graduation.	Address.
Conboy, Daniel, B.A.	1888	
Condell, Wm. N., M.D.	1898	Spencerville.
*7Conn, James R., M.A.	1896	Napanee.
3Connell, James C., B.A., 1884; M.A., 1885; M.D., (Dean of Medical Faculty, Queen's University)	1888	Kingston.
Connell, Jessie C., (Binnie) B.A.	1892	Tweed.
Connell, J. V., M.D.	1902	Spencerville.
Connell, W. T., M.D., (Professor Queen's University)	1894	Kingston.
Conner, F. E., M.D.	1899	Macdonald, Man.
Connerty, J. Moore, M.D.	1886	Smith's Falls.
Connolly, A. K., M.D.	1904	Kingston.
Connolly, E. W., M.D.	1900	Duncan's Mills.
3Connolly, Henry A., M.A.	1885	Lachute, Que.
Connor, Grace L., M.A.	1905	Kingston.
Cook, Gertrude A., B.A.	1903	Stratford.
*Cook, John, LL.D.	1880	(Deceased.)
Cooke, John A., B.A.	1884	Morrisburg.
Cooke, William H., M.D.	1888	Minneapolis, Minn.
Coon, Darius A., M.D.	1890	Elgin.
Cooper, E. G., M.D.	1899	Calabogie.
Copeland, George T., B.A.	1889	Cornwall.
Corbett, George H., M.D.	1856	(Deceased.)
Corbett, Henry T., M.D.	1868	(Deceased.)
Corkill, Edward J., B.A.	1886	Harriston H. S.
Corkill, E. T., B. Sc., 1904; M.E.	1905	Bureau of Mines, Toronto.
Corliss, Margaret A., M.D.	1885	Australia.
*Cormack, James, B.A.	1872	Ottawa.
Cormack, John H., M.D.	1893	Ottawa.
Cornell, Albert P., M.D.	1882	(Deceased.)
Cornell, Stanley S., M.D.	1886	Athens.
*Cornett, William H., B.A.	1887	Cleveland, O.
Corrigan, D. J., M.D.	1898	West Webster, N. Y.
Corry, Robert, M.D.	1861	(Deceased.)
*Cosgrove, Thomas A., B.A.	1887	
Costello, T. J., M.D.	1904	Calgary.
Couch, S., B.A.	1905	Melita, Man.
Coughlin, Richard, M.D.	1881	Hastings.
Countryman, John E., M.D.	1893	Drayton, N. Dak.
*Coussirat, Daniel, B.D., D.D., (Prof., McGill University)	1893	Montreal.
Coutlee, Hillier Noel, M.D.	1882	Sharbot Lake.
Cowan, H., B.D.	1905	Shakespeare.
Cowan, S. G., B.A.	1901	Peterboro.

Name.	Date of Graduation.	Address.
14Cowley, R. H., B.A., 1889; M.A	1893	Ottawa.
Cox, John, (Professor, McGill University) LL.D..	1903	Montreal.
Coy, William F., M.D..	1886	Vancouver.
Craft, Robert A., M.D..	1895	
Craig, Hugh A., M.D..	1878	(Deceased.)
Craig, H. B. R., B.Sc..	1903	Kingston.
Craig, James J., B.A..	1874	Mount Forest.
Craig, J. D., B.A., 1897; B.Sc.. .	1900	Ottawa.
*Craig, Robt. J., B.A., 1871; M.A.	1874	Kingston.
Craig, William, B.A..	1858	(Deceased.)
Craine, Agnes D., M.D..	1888	Smith's Falls.
*Cram, W. H., B.A., 1895; B.D..	1900	Cobden.
Cranston, James G., M.D..	1860	Arnprior.
Cranston, James J., M.D..	1895	Arnprior.
Crawford, Joseph, M.D..	1857	(Deceased.)
12Crawford, Robert, B.A..	1869	Kingston.
*Crawford, W. F., B.A., 1900; B.D..	1903	Chesterville.
Creeggan, Jno. G., B.A., 1878; M.D..	1886	Delta.
Creighton, J. E. (Sage Professor, Cornell University), LLD...	1903	Ithaca, N.Y.
Crews, J. W., M.D..	1902	Rochester, N.Y.
Croft, L. V., B.A...	1899	Middleville.
Croskery, Robert A., B.A..	1896	Napanee.
Croskery, E. A., M.D..	1897	Trelona, Wyo.
Crozier, J. A., B.A..	1897	
Cryan, Georgina (Fraser), B.A.	1898	Uxbridge.
Cryan, John, M.D..	1883	Demorestville.
Cryan, J. H., M.D...	1903	Demorestville.
*Cumberland, Jas., B.A., 1877; M.A....	1880	Stella.
Cumberland, Thomas, M.D..	1884	(Deceased.)
12Cumberland, Judge Thos. D., B.A..	1875	Brandon, Man.
Cumming, A. L., B.Sc..	1905	Cornwall.
Cumming, Lucy, B.A..	1903	Lyn.
Cummings, J. G., B.A..	1898	
Cunningham, Arthur B., B.A.. .	1891	Kingston.
Cunningham, Dav., B.A., 1887; M.D..	1890	(Deceased.)
Cunningham, Henry C., M.D....	1885	Carman, Man.
Curle, William, B.A., 1889; M.A.	1890	Toronto.
*Curran, Wm. B., B.A., 1859; M.A..	1870	Colwich Rectory, Nottingham, Eng.

Name.	Date of Graduation.	Address.
*Currie, Arch., B.A., 1858; M.A.	1861	Sonya.
*Currie, John, D.D., (Professor, Theological Hall)	1885	Halifax.
Currie, P. W., B.Sc.	1901	Ottawa.
Curry, James W., B.A.	1878	Toronto.
Curtin, C. J., B.A.	1905	Brockville.
Curtin, T. V., M.D.	1901	Brockville.
3aDadson, Helena, B.A.	1905	Union.
Dalton, G. F., B.A., 1898; M.D.	1902	Kingston.
*Daly, Charles H., B.A.	1890	Lyn.
Daly, Wilberforce, B.A.	1880	
Dame, Alexander A., M.D.	1886	Toronto.
Dandeno, J. B., B.A.	1895	Chicago.
*D'Argent, William E., B.A.	1884	389 South Hohman St., Hammond, Ind.
Dark, T. A., M.A.	1904	Wicklow.
Darragh, Robert J., M.D.	1886	
David, Alfred, M.D.	1873	
David, William C., M.D.	1889	West Bay City, Mich.
Davies, Ransom A., M.D.	1876	Easton's Corners.
Davis, Bidwell N., B.A.	1881	Toronto.
Davis, John J., M.D.	1894	New York, N.Y.
Davis, Lewis T., M.D.	1883	Nanaimo, B.C.
Davis, Robert H., M.D.	1858	York, Grand River.
Davis, Sydney N., M.D.	1891	York.
Davis, William H., M.A.	1893	
Davis, J. S., B.A.	1898	Ottawa.
Davis, N. A., M.D.	1898	Fallowfield.
Davidson, Myers, M.D.	1864	(Deceased.)
*Dawson, Æneas McD., LL.D.	1886	(Deceased.)
*Dawson, Alexander, B.A.	1859	Parkdale.
Dawson, George M., LL.D.	1890	(Deceased.)
Dawson, Henry G., M.D.	1885	Cape Vincent, N.Y.
Dawson, Annie L., B.A.	1898	Ompah.
Day, Alfred E., B.A., 1895; M.A.	1896	Walkerton H. S.
Day, Barnabas W., M.D.	1862	San Diego, Cal.
Day, H. E., M.D.	1902	Kingston.
Day, Henry W., M.D.	1859	(Deceased.)
Day, Jonathan, M.D.	1877	(Deceased.)
Day, Lewis E., M.D.	1880	(Deceased.)
Day, Walter D. P. W., M.D.	1871	(Deceased.)
Day, Isaac, B.A.	1898	Orillia.
Deacon, M. Alberta, B.A.	1900	Brockville.
Dean, Marshall B., B.A.	1895	
Deans, George, M.D.	1865	(Deceased.)
Deans, William C., M.D.	1861	(Deceased.)
de la Matter, Cornelia, B.A.	1900	Smithville H. S.

Name.	Date of Graduation.	Address.
DeLong, E. W., M.D.	1904	Gananoque.
Demorest, Clara, M.D.	1890	Napanee.
Dempster, J. H., B.A.	1899	London.
Denaut, Henry J., M.D.	1892	South Bend, Ind.
Denike, George H., M.D.	1882	
Dennis, E. M., B.Sc.	1904	Ottawa.
Dennistoun, Robert M., B.A.	1885	Peterboro.
Densmore, L. D., M.D.	1901	Maitland, N. S.
Denyes, James M., B.A.	1895	Whitby.
Detlor, W. T., B.A.	1899	Napanee.
Devlin, J. L., M.D.	1899	
*Dewar, Donald L., B.A.	1886	Ailsa Craig.
Deynard, Adelbert B., M.D.	1875	New York.
Dickey, J. S., M.D.	1903	North Williamsburg.
Dickson, Andrew F., M.D.	1890	
Dickson, Annie E., M.D.	1886	(Deceased.)
Dickson, Charles R., M.D.	1880	Toronto.
9Dickson, C. W., M.A.	1900	Kingston.
Dickson, Ethel A., (Nickle) B.A.	1898	Kingston.
Dickson, John R., M.D.	1863	(Deceased.)
Dickson, John R., M.D.	1868	(Deceased.)
Dickson, M. Evelyn, B.A.	1902	Kingston.
Dingman, William E., M.D.	1875	Listowel.
Dingwall, Annie C., B.A.	1903	Cornwall.
Dingwall, J., B.A.	1903	Cornwall.
Dingwall, James, B.A.	1861	Cornwall.
Dingwall, M., B.A.	1903	Cornwall.
Dixon, Andrew F., M.D.	1890	
Dixon, John W., M.D.	1890	Burlington, Iowa.
Dixon, Mortimer L., M.D.	1886	Frankville.
5Dolan, G., B.A.	1899	Berlin H. S.
Dolan, John H., B.A.	1897	Picton.
*Donald, William, D.D	1861	(Deceased.)
Donald, William, B.A.	1873	Pilot Mound, Man.
5, 7Donnell, J. A., M.A.	1902	Kingston.
Donnelly, J., jr., M.E.	1898	Kingston.
Donovan, Edward, M.D.	1886	Langdon, Dak.
Donovan, Mary (Melville), B.A.	1892	Bakersville, Vt.
Donovan, Patrick C., M.D.	1879	Neche, N. D.
Douglas, Harry E., M.D.	1892	Muncie, Ind.
Douglas, H. E. N., M.D.	1897	Kingston, Jamaica.
Douglas, James, B.A.	1858	99 John St., N.Y.
Douglas, Robt., B.A., 1851; M.D.	1855	(Deceased.)
Dow, John Ball, B.A.	1875	Whitby.
Down, G. W., B.A.	1905	Erin.
Downing, James J., B.A.	1881	(Deceased.)
Downing, Jos. J., B.A., '92; M.D.	1896	Chesley.

Name.	Date of Graduation.	Address.
Downing, William H., M.D.....	1888	(Deceased.)
Dowsley, David H., M.D..	1875	Ottawa.
Dowsley, George C., M.D..	1875	Gore Bay.
Dowsley, W. C., M.A..	1898	Athens H. S.
Doyle, J. D., M.D..	1898	Brooklyn, N. Y.
Drennan, Ethel, B.A..	1900	
Drennan, Jennie G., M.D..	1895	St. Thomas.
Driscoll, A. C., M.D..	1904	Trenton.
Drummond, Andrew T., B.A., 1860; LL.B., 1863; LL.D....	1896	Toronto.
*Drummond, Daniel R., B.A., '89; M.A., 1890; B.D....	1892	Hamilton.
Drummond, Francis A., B.A.....	1877	Winnipeg.
Drummond, Peter, M.D..	1889	Grant, Mich.
*Drummond, William J., B.A...	1885	Nanking, China.
Drummond, S. J., M.D..	1897	Casnovia, Mich.
*Duclos, John E., B.A..	1884	Valleyfield.
*Duff, A., D.D....	1903	Bradford, Eng.
Duff, John, M.D..	1889	(Deceased.)
Duff, H. Ramsay, M.D..	1884	Kingston.
4Duff, J., M.A..	1899	Kingston.
Duff, K. Isobel, M.A..	1904	Otonabee.
Dugdale, John J., M.D..	1867	(Deceased.)
Dumble, Thomas H., M.D..	1877	(Deceased.)
Dumble, William C., M.D...	1877	Toronto.
*Dumoulin, Bishop John P., M.A.	1870	Hamilton.
Dunbar, Neil, B.A..	1854	(Deceased.)
Dunbar, Samuel, M.D..	1855	(Deceased.)
1, 18Duncan, T. S., M.A...	1904	Westport.
Dunkley, A. W., M.A..	1899	Orangeville H. S.
Dunkley, W. G., B.A..	1902	Picton.
Dunlop, H., B.A..	1905	Kingston.
Dunlop, James D., M.D..	1887	Alpena, Mich.
Dunlop, J. E. S., B.A..	1904	Ventnor.
*15Dunlop, John G., B.A., 1887; M.A..	1891	Japan.
Dunlop, Neil, M.D..	1861	Sydenham.
Dunn, Andrew T., M.D..	1864	North Augusta.
Dunning, J. C., M.D..	1897	Chicago, Ill.
Dupuis, Charles B., B.A..	1887	(Deceased.)
Dupuis, Eugene L., M.D..	1890	Seattle, Wash.
8Dupuis, James M., M.D..	1881	(Deceased.)
Dupuis, Nathan F.,(Dean, Faculty of Practical Science, Queen's University), B.A., 1868; M.A..	1868	Kingston.
Dupuis, Thomas R., M.D... ...	1860	(Deceased.)

Name.	Date of Graduation.	Address.
Durie, C. L., B.A.	1899	Ottawa.
Dwyer, E., B.Sc.	1902	Kingston.
Dwyer, J. G., M.A.	1902	Kingston.
Dwyre, Andrew W., M.D.	1885	Perth.
*Dyckman, Henry M., B.A.	1887	Pottstown, Penn.
Dyde, Chas. A., B.A., 1894; M.D.	1897	Greeley, Col.
Dyde, Geo. E., B.A., 1889; M.A.	1897	(Deceased.)
1, 4Dyde, S. W., (Professor, Queen's University), B.A., 1883; M.A., 1884; D.Sc.	1887	Kingston.
*Eakin, Joseph F., B.A.	1866	(Deceased.)
Earl, William M., M.D.	1890	Bishop's Mills.
Eastman, F. S., B.A.	1903	Smithville.
*6Easton, William H., M.A.	1893	
Echlin, Edm. J. B., B.A., 1899; M.D.	1891	Ottawa.
*Edmison, Henry, B.A., '63; M.A.	1866	Rothsay, Ont.
Edmison, G. A., B.A.	1898	
*Edmison, J. H., B.A.	1898	Cheltenham.
Edwards, C. B., B.A.	1900	London, Ont.
Edwards, Cephas H., B.A.	1896	Keene.
Edwards, J. W., B.A., 1900; M.D.	1900	Cataraqui.
Elder, Hosie, M.A.	1905	Elder's Mills.
Eldon, R. H., B.A.	1901	Harbord St. C. I., Toronto.
Elliott, Arthur R., M.D.	1889	Chicago.
Elliott, Edwin, B.A.	1886	Kingston.
Elliott, Gilbert John, Earl of Minto, G.C.M.G., LL.D.	1899	
Elliott, H. H., M.D.	1898	Seeley's Bay.
*Elliott, Jas., (Professor Wesley Theological College, Montreal) Ph.D.	1904	Montreal.
Elliott, John, B.A.	1889	Leamington.
Elliott, Thomas A., B.A.	1879	
Elliott, Walter H., B.A.	1894	Hamilton.
Ellis, F. J., M.D.	1903	Ellisville.
Ellis, G. E., B.A.	1901	Ellisville.
Elmer, William W., M.D.	1858	Spokane Falls, Wash.
Elwell, W. D., M.D.	1863	(Deceased.)
Embury, Alex. T., M.D.	1896	Belleville.
Embury, Elizabeth, MD.	1888	Belleville.
Emery, George F., M.D.	1889	Gananoque.
Emery, Horatio J., M.D.	1884	
Empey, Charles T., M.D.	1880	Cross Hills, Leeds, Eng.
Empey, William A., M.D.	1881	Spencerville.

Name.	Date of Graduation.	Address.
Erly, Francis W. J., M.D.	1868	(Deceased.)
Errett, Alfred J., M.D.	1887	(Deceased.)
Errett, Bessie D., B.A.	1904	Chatham.
Eshoo, S. O., M.D.	1902	Oroomiah, Persia.
*Etherington, Edward J., B.A.	1891	Sunderland.
Etherington, F., M.D.	1902	Portsmouth.
Evans, Henry, M.D.	1858	(Deceased.)
Evans, Henry A., M.D.	1878	(Deceased.)
*Evans, Joseph, B.A., 1855; M.A.	1857	Rowland, N.S.
Ewart, W. M., B.A.	1898	Smith's Falls.
Ewing, Florence M., B.A.	1903	Cataraqui.
11Ewing, William C., M.A.	1895	Renfrew.
Fadden, W. S., M.D.	1898	Aultsville.
Fahey, E. W., M.D.	1901	Kingston.
Fairbairn, Archibald C., M.D.	1871	Minneapolis, Minn.
Fairfield, Charles A. D., B.A.	1887	St. Catharines.
Fairlie, J., B.A.	1905	Kingston.
Fairlie, T. U., B.Sc.	1905	Kingston.
Fairlie, M. F., B.Sc.	1902	Bingham, Utah.
Falconer, John P., B.A.	1889	Sydney, C. B.
Falkner, A. D., M.D.	1904	Ottawa.
Falkner, J., B.A.	1903	Williamstown.
Farley, Frank J., M.D.	1894	Trenton.
Farrell, Alexander G., B.A.	1885	Smith's Falls.
Farrell, James M., B.A.	1889	Kingston.
Farrell, J. T., M.D.	1861	(Deceased.)
Farrell, Thomas H., B.A., 1889; M.A., 1890; M.D.	1895	Utica, N. Y.
Farquarson, R. A., B.A.	1898	Kincardine.
Fee, Samuel H., M.D.	1862	Kingston.
*Fee, S. M., B.A.	1899	Newdale, Man.
*6Fee, W. M., M.A.	1899	Alexander, Man.
Feek, Robert G., B.A.	1882	
*Feir, Harry, B.A.	1895	Basswood, Man.
11Fenwick, Arthur M., M.A.	1890	Regina, N.W.T.
Fenwick, Kenneth N., B.A., 1871; M.A., 1874; M.D.	1874	(Deceased.)
Fenwick, Thomas M., M.D.	1864	(Deceased.)
Ferguson, Allen G., M.D.	1887	Chicago.
Ferguson, Archibald, B.A.	1883	Winnipeg.
Ferguson, A. A., M.D.	1904	Glenwalter.
Ferguson, C. A., B.A.	1897	Admaston.
Ferguson, Charles F., M.D.	1859	Kemptville.
Ferguson, E. A., M.D.	1904	Kingston.
Ferguson, Edward G., M.D.	1863	Macon, Georgia.
Ferguson, George A., B.A.	1894	Owen Sound.

Name.	Date of Graduation.	Address.
*Ferguson, George D., (Professor, Queen's Univ.), B.A...	1851	Kingston.
Ferguson, James F., B.A..	1862	Kingston.
Ferguson, J., B.A..	1904	Fergus.
*Ferguson, John, B.A., 1876; M.A., 1878; B.D..	1879	(Deceased.)
Ferguson, J. Y., B.A., 1902; M.D.	1905	Admaston.
Ferguson, M., B.Sc..	1904	Kingston.
5Ferguson, Robert, B.A..	1882	London.
Ferguson, Robert B., M.D..	1863	(Deceased.)
Ferguson, Thomas B., B.A.. ..	1863	
Ferguson, T. R., M.A...	1904	Wiarton.
Ferguson, William B., B.A.. ..	1861	(Deceased.)
*Ferguson, T. J. S., B.A..	1898	Blackstock.
Fernow, B. E., LL.D..	1903	Ithaca, N.Y.
Ferrier, G. C., M.D..	1900	Kingston.
Fetterly, H. B., B.A..	1904	Winchester.
Fielding, Hon. Wm. Stevens, (Minister of Finance, Ottawa) LL.D..	1903	Ottawa.
File, Albert J., M.D..	1869	Ameliasburg.
8Findlay, John, B.A., 1887; M.A.	1888	Los Angelos, Cal.
2Findlay, William A., B.A.. ..	1888	
Finlayson, M. D., B.Sc..	1903	Transcontinental Ry.
Finlayson, R. A., B.A..	1898	N. E. Margaree, N.S.
Finn, J. P., B.A..	1905	Kingston.
Firth, W. P., B.A., 1900; M.A..	1901	Pickering.
Fisher, Albert J, M.D..	1887	Brigden.
Fitchett, H. H., B.A., LL.D....	1899	Melbourne, Aus.
*17Fitzgerald, Alfred, B.A,. ..	1889	Whitby.
Fitzgerald, Eliza S., B.A., 1884; M.A..	1899	Cornwall H. S.
Fitzgerald, Gerald D., M.D.. ..	1894	(Deceased.)
*Fitzpatrick, Alfred, B.A..	1889	
Flath, Emma S., B.A..	1902	Alexandria H. S.
Fleck, James, D.D....	1905	Montreal, Que.
Fleming, A. G., B.A..	1904	Craigleith.
Fleming, Hugh P., M.D....	1895	Ottawa.
Fleming, Maud E., B.A..	1903	Craigleith.
*Fleming, David, B.A...	1887	Strathcona.
Fleming, W. S., B.A..	1905	Franktown.
*Fletcher, Rev. D. H., D.D..	1903	Hamilton.
Fletcher, Jas., F.R.S.C., LL.D...	1896	Ottawa.
Fletcher, John, (Professor, Toronto Univ.) M.A., LL.D...	1896	Toronto.
11Fletcher, W. H., M.A..	1902	Toronto Junct. C. I.
Fletcher, William P., B.A..	1896	Newmarket.

Name.	Date of Graduation.	Address.
Foik, H. J., B.A.	1905	Kingston.
Foley, Declan E., M.D.	1886	Westport.
Foley, Ignatius J., M.D.	1891	(Deceased.)
Foley, T. B., M.D.	1903	Charlottetown, P.E.I.
10Folger, Howard S., B.A.	1887	Kingston.
Folger, Matthew H., B.A.	1885	New York, U. S.
14Ford, A. B., M.A., 1894; M.D.	1897	Whitby.
Ford, C. Y., M.D.	1900	
Ford, Henry B., M.D.	1885	Bouck's Hill.
Ford, Herbert D., M.D.	1874	Chicago, Ill.
*Forest, John, D.D., (Principal Dalhousie College)	1863	Halifax.
Forfar, Lena M., B.A.	1903	Ellesmere.
Forin, Alexander, M.D.	1894	Nelson, B.C.
Forrester, Edgar, B.A., '82; M.D.	1884	Brockville.
Fortescue, Charles, B.Sc.	1898	Kingston.
Foster, Robert J., M.D.	1859	(Deceased.)
*Fotheringham, R. H., B.A.	1903	Rothsay.
Fowkes, John T., M.D.	1891	Lafrageville, N.Y.
Fowlds, Mary T., B.A.	1896	Hastings.
Fowler, Annie L., B.A.	1884	Kingston.
Fowler, Fife, M.D., (Dean, Medical Faculty, Queen's Univ.).	1863	(Deceased.)
5Fowler, Henry C., B.A.	1881	Toronto.
Fowler, Jennie (Kilborn), B.A.	1890	(Deceased.)
*Fowler, William J., B.D.	1888	Kirkland, N.B.
Fowlie, A. J., B.A.	1901	Erin.
Fox, Catherine H. C., B.A.	1902	Mountain Grove.
Fox, Charles B., M.A.	1894	Supt. Pittsburg Reduction Co., St. Louis, Ill.
Fox, Edward C., M.D.	1864	
Foxton, Edward, M.D.	1884	Ottawa.
Foxton, Joseph, B.A.	1886	Kingston.
Fraleck, Judge Edison B., B.A.	1863	Belleville.
Fraleck, E. L., B.A.	1897	Belleville.
Franklin, Benjamin W., M.D.	1856	
Fraser, Anson S., M.D.	1869	Sarnia.
Fraser, Alexander G., B.A.	1852	(Deceased.)
Fraser, Archibald, B.A.	1848	(Deceased.)
*Fraser, Donald, B.A., '64; M.A.	1866	(Deceased.)
Fraser, George, L.B., B.A.	1870	Ottawa.
Fraser, Helen F., B.A.	1901	Hamilton.
*Fraser, James, B.A.	1865	Cushing, Que.
*Fraser, Jas. R., B.A., '93; M.A.	1895	Uxbridge.
Fraser, John, M.A., LL.D.	1887	Maitland, Aus.
Fraser, John B., M.D.	1888	Toronto.

Name.	Date of Graduation.	Address.
*Fraser, John F., B.A.	1869	
Fraser, John M., B.A., 1857; M.D	1861	(Deceased.)
*Fraser, Joshua, B.A.	1858	(Deceased.)
Fraser, Robert N., M.D.	1884	Thamesville.
Fraser, Wilhelmine G., M.D.	1890	India.
*Fraser, William, D.D.	1878	(Deceased.)
Fraser, Annie E., B.A.	1897	Victoria, B.C.
Fraser, William A., B.A.	1898	Marion Bridge, N.S.
*Fraser, Thurlow, B.A., '98; B.D.	1898	Portage la Prairie.
Frechette, Louis H., LL.D.	1881	Montreal.
Freeland, Anthony, M.D.	1889	Ottawa.
Freeman, Albert E., M.D.	1887	Inverary.
Frizell, J. R., B.A.	1897	Rouleau, Assa.
Froats, W. C., M.A.	1904	Morrisburg.
Froiland, Herb. M., B.A., 1882; M.D.	1883	(Deceased.)
Fuller, Wm. H., B.A., 1867; M.A.	1873	(Deceased.)
Fulton, Cyril, M.D.	1894	Lyons, N.Y.
Funnell, Ada A., M.D.	1887	Hamilton.
Funnell, Rozelle V., M.D.	1890	Ottawa.
11Furlong, Thomas H., M.A.	1897	Simcoe.
Gage, H. E., M.D.	1902	Kingston.
Gage, J. E., M.D.	1898	Riverside, Cal.
Gage, R. G., B.Sc.	1905	Riverside, Cal.
Galbraith, J., (Principal, School of Practical Science) LL.D.	1903	Toronto.
Galbraith, John E., M.D.	1880	(Deceased.)
Galbraith, R. B.A.	1897	Simcoe.
Gallaher, Morton, M.D.	1887	Bay City, Mich.
*Gallaher, John, B.A.	1878	(Deceased.)
Galligan, Thomas D., M.D.	1886	Eganville.
Gallivan, J. V., M.D.	1904	Kingston.
4, 5*Gandier, Alf., B.A., '84; M.A	1887	Toronto.
Gandier, Augustin, M.D.	1890	Sherbrooke, Que.
*Gandier, Daniel McG., B.A.	1894	San Bernardino, Cal.
Gandier, J. C., B.A.	1901	Newburgh.
Gardiner, R. J., M.D.	1891	Seeley's Bay.
Gardiner, Sydney H., B.A., 1897; M.D., 1889; M.A.	1890	Brooklyn, N.Y.
Garrett, Richard W., M.D., (Professor, Queen's University	1882	Kingston.
Gaudet, E. A., M.D.	1905	
Gavin, Frederick P., B.A.	1896	Windsor.
Geddes, Robert W., B.A.	1896	Deseronto.
*Geddie, John, D.D.	1866	(Deceased.)
*Geikie, A. Constable, LL.D.	1884	(Deceased.)
*Geikie, J. Cunningham, D.D.	1871	Barnstable, Eng.

Name.	Date of Graduation.	Address.
Genge, T. S., M.D.	1901	Holleford.
Genge, William W., M.D.	1891	
Gerin, John, M.D.	1872	Auburn, N.Y.
Gibson, Albert E., M.D.	1887	Oakland, Iowa.
Gibson, A. S., B.A.	1904	Kingston.
Gibson, H. A., M.D.	1903	Kingston.
Gibson, J. Copeland, M.A., 1892; M.D.	1896	Hamilton.
Gibson, James C., M.D.	1892	New Haven, Mich.
Gibson, James F., M.D.	1891	Kingston.
Gibson, James D., M.D.	1893	
Gibson, John J., M.D.	1893	Alexandria, Ind.
Gibson, A. M., M.D.	1874	(Deceased.)
Gibson, Wm., M.D.	1904	Emerald.
Gibson, William J., B.A., 1874; M.D., 1881; M.A.	1882	Belleville.
Gildersleeve, James P., LL.B.	1863	Kingston.
Giles, George C., M.D.	1893	Marne, Iowa.
Giles, John G., M.D.	1860	Athens.
Gilfillan, James, B.A.	1896	Bowmanville.
*Gill, Henry, D.D.	1865	England.
Gillen, Erastus, M.D.	1894	(Deceased.)
Gillespie, Henry M., M.D.	1896	Elma, Iowa, U.S.
Gillespie, J. J., M.D.	1904	Morrisburg.
Gillies, D. A., B.A.	1905	Carleton Place.
Gillies, George, B.A.	1874	Toronto.
Gillies, Neil, M.D.	1871	Brandon, Man.
Gillies, William F., B.A.	1891	(Deceased.)
Gillis, Angus B., M.D.	1888	Salem, Ore.
Girvin, A. W., M.D.	1905	Stella.
12Givens, David A., B.A.	1878	Kingston.
Givens, Hannah A., (Marshall) B.A.	1887	(Deceased.)
Givens, William R., B.A.	1888	41st St., N. Y.
*Glassford, Thomas S., B.A.	1875	Naksup, B.C.
Gleeson, James H., M.D.	1864	(Deceased.)
Gleeson, J. V., B.Sc.	1904	Kingston.
*Glover, Thomas J., B.A.	1894	Kingston.
4Gober, Mai, (Agnew) B.A., 1898; M.A.	1899	
Goodchild, J. F., M.D.	1899	Craigleith.
Goodfellow, J., B.A.	1900	Parham.
Goodfellow, J. R., M.D.	1904	Kingston.
Goodwill, J. E. L., B.A.	1903	Charlottetown, P.E.I.
*Goodwill, T. W., B.A.	1898	Marmora.
Goodwill, V. L., M.D.	1899	Charlottetown, P.E.I.
Goold, Arthur J., B.A.	1883	Waterford.

Name.	Date of Graduation.	Address.
Goldschmidt, Victor, (Professor of Mineralogy, Heidelberg University) LL.D.	1903	Heidelberg, Germany.
Gordanier, W. N., B.Sc.	1903	Napanee.
*Gordon, James, B.A., 1851; M.A.	1854	(Deceased.)
Gordon, John G., B.A.	1861	Slocan, City, B.C.
Gordon, Annie E., B.A.	1897	Ottawa.
*Gordon, D. L., B.A.	1897	Cobden, B.C.
4Gordon, Wilhelmina, M.A.	1905	Kingston.
*Gould, S. H., B.A., M.D.	1897	Nablus, Palestine.
8Gould, W. H., M.A.	1900	Kingston.
*Gow, Robert, B.A.	1883	Beaverdale, Man.
3*Govan, Arpad, B.A.	1883	Williamstown.
Gowan, James R., C.M.G., LL.D.	1884	Barrie.
*Graham, Archibald, B.A.	1892	Parkhill.
Graham, C. W., B.A.	1905	Kingston.
Graham, D., M.D.	1902	
Graham, Elsie K., (Murray) B.A.	1902	Londonderry, N.S.
Graham, Hedley C. W., M.D.	1889	Rochester, N.Y.
Graham, J. A., M.D.	1904	Montreal.
Graham, P. E., B.A.	1898	Dunnville H. S.
Graham, R. R., B.A.	1902	Athens H. S.
Graham, S. N., B.Sc.	1900	Kingston.
Grange, Thomas A., B.A.	1895	(Deceased.)
Grange, William A., B.A.	1898	Napanee.
Grant, A. F., M.D.	1899	Peterboro.
Grant, Ethel I., B.A.	1903	Martintown.
*Grant, Hugh R., B.A.	1883	Rossland, B.C.
*Grant, James A., B.A.	1878	Richmond Hill.
Grant, J. R., B.Sc.	1905	Chesley.
*Grant, Kenneth A., M.A., D.D.	1893	San Fernando, W.I.
Grant, Norman M., B.A., 1886; M.D.	1889	Auckland, New Zealand.
*Grant, Peter, D.D.	1868	Dundee, Scotland.
*Grant, William, D.D.	1883	(Deceased.)
1, 2Grant, William L., M.A.	1894	Hotel de Nice, Rue des Beaup Arts, No. 4 bis, Paris.
Grasse, Sydney D., M.D.	1864	(Deceased.)
Gray, Henrietta A., B.A.	1899	Kingston.
*Gray, John, D.D., B.A., 1874; M.A.	1876	Orillia.
*Gray, S. Harper, B.A.	1894	Dundas.
Gray, T. J., M.D.	1904	Kingston.
Gray, William A., M.D.	1890	Pembroke.
Green, Samuel D., M.D.	1891	

Name.	Date of Graduation.	Address.
Greenhill, Eva M., B.A.	1899	Smith's Falls.
Grenfell, Caroline P., B.A.	1899	Arnprior.
Grenfell, M. Elizabeth, B.A.	1899	Maksup, B.C.
Grey, Earl, Gov.-Gen., LL.D.	1905	Ottawa.
Grey, J. M., B.A.	1903	Kingston.
4Grey, S. L. H., M.A.	1903	Athens.
Griffin, A. D., B.A.	1901	Woodstock.
Griffin, E. Scott, B.A.	1884	Toronto.
Griffith, Agnes J., M.A.	1896	Quebec.
Griffith, Edna B., B.A.	1896	Sydenham.
Grimshaw, M. E., M.D.	1905	Wolfe Island.
Grimshaw, W. S., M.D.	1901	Kingston.
Grove, W. G., B.A.	1905	Ringwood.
Grover, G. A., B.Sc.	1902	Kingston.
28Guess, George A., M.A.	1894	
Guess, Harry A., M.A.	1895	Cananea. Sonora, Mexico.
7Guggisberg, W. W., B.A.	1904	Hamilton.
Gunsolus, Kenneth, M.D.	1871	Detroit, Mich.
28Guy, R. D., M.A.	1905	Camden East.
*Guy, W. A., B.A., 1897; B.D.	1901	MacDonald's Corners.
Hackett, Joseph, M.D.	1858	(Deceased.)
Hadden, A. T., B.A.	1905	Toronto.
Hagar, A. E., B.A.	1902	
Hagar, Frederick C., M.D.	1895	Smith's Falls.
Haig, Andrew, B.A., 1888; M.A., 1889; M.D.	1891	Kingston.
Hainer, F. L., B.A.	1904	Stouffville.
Hales, James, B.A., 1888; LL.B.	1893	Toronto.
6Hall, J. R., B.A., 1897; M.A.	1898	Sarnia.
Hall, T. F., B.A.	1904	Cobourg.
Hall, W. A., B.A., 1898; M.D.	1900	Kingston.
Halladay, R. W., B.A., 1902; M.D.	1905	Elgin.
Halliday, Henry, B.A.	1884	Pembroke.
Hamilton, Andrew, B.A.	1855	(Deceased.)
Hamilton, David, M.D.	1862	Batavia, N. Y.
5, 21Hamilton, Charles F., M.A.	1890	Ottawa.
Hamilton, David J., B.A.	1895	(Deceased.)
Hamilton, Jno. A., B.A., '77; M.D	1886	(Deceased.)
Hamilton, J. C., B.A.	1897	
Hamm, B. N., B.A.	1899	Kamloops, B.C.
Hanley, A. T., B.A., M.A.	1899	
Hanley, G. J., M.D.	1902	
Hanley, J. H., M.D.	1900	Kingston.
Hanley, Robert, M.D.	1898	Kingston.
Hanna, James E., M.D.	1886	Ottawa.

Name.	Date of Graduation.	Address.
Harcourt, Hon. Richard (Minister of Education), LL.D....	1903	Toronto.
Harding, William E., M.D.. ...	1888	Brockville.
Hare, William G., M.D..	1892	Bay City, Mich.
Harkness, Fred B., M.D..	1889	North Gower.
Harkness, Thomas F., B.A.. ...	1862	(Deceased.)
Harpell, J. J., B.A..	1902	Toronto.
Harper, A. M., B.A..	1900	Vancouver, B.C.
Harper, John M., B.A..	1882	Quebec.
Harrington, A. W., M.D..	1881	(Deceased.)
Harris, J. Alton, M.D..	1899	
Harrison, Edgar D., M.D..	1891	Madoc.
Harrison, T. S., M.D..	1865	Selkirk, Man.
Hart, John F., M.D..	1887	Athens.
Hart, Michael W., M.D..	1887	Prescott.
*Hart, Thomas (Professor, Manitoba College), B.A., 1860; M.A., 1868; B.D., 1880; D.D.	1902	Winnipeg.
Harten, Geo. H., B.A..	1902	
*Hartwell, George E., B.A.. ...	1888	Chentu, China.
Harty, J. J., M.D..	1897	Kingston.
Harvie, William D., M.D..	1889	
Harvey, Albert E., M.D..	1869	Wyoming.
Harvey, Catharine, B.A.(Conley)	1897	Ottawa.
Harvey, J. F., B.A..	1902	Sydenham.
Hasken, B., M.D..	1903	Greenbush.
Hastings, F. R., M.D..	1900	
Hawes, Ida E., M.A..	1905	Pasadena, Cal.
Hawley, A. T., M.A....	1899	Napanee.
Hawley, Gilbert T., B.A..	1897	
7Hay, Arthur G., B.A., '89; M.A. 4, 7, 13, *Hay, Jno., B.A., 1882;.. B.D..	1885	Renfrew.
Hay, William, B.A., 1883; M.D.. 5, 7, 16Haydon, Andrew, M.A., 1893; LL.B..	1887	Wolfe Island.
Hay, W. McD., B.A..	1896	Almonte.
Hayes, William J., B.A..	1905	Kingston.
Hayunga, George, M.D..	1890	(Deceased.)
Hazlett, J. W., B.A., 1901; B.Sc.	1890	502 Canal St., New York.
1Heap, Frederick, M.A..	1903	Kingston.
Heath, Frederick C., B.A., 1878; M.D..	1890	Selkirk, Man.
Heenan, Daniel, B.A..	1886	Brantford.
Heeney, T. F., B.A..	1849	(Deceased.)
Heggie, David, M.D..	1898	Lansdowne.
	1865	Brampton.

Name.	Date of Graduation.	Address.
Henderson, Donald, M.D.	1858	
Henderson, E. Mabel, M.D.	1892	Hamilton.
21Henderson, George F., B.A.	1884	Ottawa.
Henderson, E. W., B.Sc.	1905	Almonte.
Henderson, Johnson, B.A.	1885	Armour, Inst., Chicago, Ill.
Henderson, Kenneth, M.D.	1883	(Deceased.)
Henderson, Norman R., M.D.	1895	London.
Henderson, William, M.D.	1895	(Deceased.)
*Henderson, William, D.D.	1862	(Deceased.)
Henderson, William H., M.D.	1879	(Deceased.)
Henry, George, M.D.	1869	(Deceased.)
Henstridge, Elizabeth, M.A.	1897	Sydenham H. S.
Herald, Dundas, M.D.	1891	Walsh, Assa.
24Herald, John, (Prof., Queen's Univ.), B.A., 1876; M.A., 1880; M.D.	1884	(Deceased.)
Herald, R. T. Wilson, M.D.	1890	N. W. T.
*Herbison, Robert, M.A.	1896	
*Herbison, William J., B.A.	1895	
Herchmer, Ethel M., (Tett) B.A.	1901	Bedford Mills.
Hermiston, George M., B.A.	1895	Picton.
Herriman, Weston LeRoy, M.D.	1855	Lindsay.
Herrington, Anthony W., M.D.	1881	(Deceased.)
Heslop, John E., M.D.	1887	West Bay City, Mich.
3(*a*)Hewton, Gertrude, M.A.	1903	Kingston.
Hickey, Daniel C., M.D.	1883	(Deceased.)
Higgins, Edward M., M.D.	1877	(Deceased.)
Higginbotham, William, M.D.	1871	Omemee.
Hilker, Adam E., M.D.	1889	Jamaica.
Hill, F. L., M.D.	1897	Seaforth, N. S.
Hill, J. T., M.D.	1902	Napanee.
Hills, W. H., M.D.	1898	Acadia Mines, N.S.
Hillier, Solomon C., M.D.	1869	Bowmanville.
Hillier, William, M.D.	1855	(Deceased.)
Hindle, George, B.A.	1899	Slocan, B.C.
Hingston, Sir William, (Professor, Faculty of Medicine, Laval University) LL.D.	1903	Montreal.
9Hiscock, R. C., M.A., '96; M.D.	1900	Kingston.
Hiscock, Reta W., B.A.	1905	Kingston.
Hoag, James P., B.A.	1896	Brantford.
Hoare, Walter W., M.D.	1864	Strathroy.
Hodge, George, M.D., (Professor Western University)	1870	London.
*Hodges, James, B.A.	1892	Oshawa.
20Hodgson, R. T., M.A.	1899	Guelph.

Name.	Date of Graduation.	Address.
Hoffman, George C., LL.D.	1895	Ottawa.
Hogan, J. T., M.D.	1905	Perth.
*Hogg, John, D.D.	1871	(Deceased.)
Holdcroft, Joseph, M.D.	1889	(Deceased.)
Holdcroft, W. T., B.A., '88; M.D	1890	Havelock.
Holmes, F. S. LeRoy, M.D.	1877	Kemptville.
*Hooper, Ebenezer, M.D.	1885	Toronto.
Hooper, Edm. J., B.A., '58; M.D.	1861	(Deceased.)
Hooper, Josephine A., (Robertson) B.A.	1885	St. John, N.B.
Hope, James A., B.A., 1862; M.A	1864	(Deceased.)
Hoppin, L. W., B.A., 1903; M.D.	1904	Kingston.
Hord, A. H., B.A., 1899; M.A.	1901	Mitchell.
Horsey, Alfred, M.D.	1865	Ottawa.
Horsey, Edward H., M.D.	1860	(Deceased.)
Horsey, Edward H., M.D.	1888	(Deceased.)
Horsey, Florence M., B.A.	1902	Kingston.
Horsey, Henry H., B.A.	1895	Shanghai.
3*Horsey, H. E., B.A., '86; M.A.	1887	Abbotsford, Que.
Horton, C. W., B.A.	1899	London, Ont.
Horton, Robert N., M.D.	1879	Brockville.
Hossie, Thomas R., M.D.	1879	(Deceased.)
Hourigan, Andrew B., M.D.	1877	
Hourigan, J. M., M.D.	1905	Smith's Falls.
Houston, D. H., M.D.	1903	Belleville.
Houston, William R., M.D.	1871	Chatham.
Howell, George W., M.D.	1867	Tweed.
Howells, Thomas B., M.D.	1863	(Deceased.)
Hoyles, N. W., B.A., LL.D.	1902	Toronto.
Hubbs, Henry A. M., M.D.	1877	
Hudson, Charles H., M.D.	1896	Belleville.
Huff, S., B.A.	1902	Meaford.
Huffman, A. F., B.A.	1900	Gilead.
Huffman, F. G., M.D.	1897	Oswego Falls, N.Y.
Huffman, R. W. M.D.	1899	
Hugo, Frank M., B.A., 1892; M.A., 1893; LL.B.	1895	Watertown, N.Y.
Hughes, R. E., M.D.	1902	
3, 8Hume, John P., B.A.	1881	Campbellford.
Hunt, A. H., M.D.	1905	Bridgetown, Barbadoes.
Hunt, Sara A., B.A.	1904	Pakenham.
*Hunter, Alexander, B.A.	1861	(Deceased.)
Hunter, H. A., B.A., '92; M.D.	1899	Fort Bidwell, Cal.
Hunter, H. S., B.A.	1903	Smith's Falls.
5Hunter, James McF., M.A.	1883	(Deceased.)
*Hunter, Robert F., B.A., 1892; M.A., 1897; B.D.	1901	

Name	Date of Graduation.	Address.
*Hunter, Robert J., B.A.	1888	Arnprior.
Hunter, W. R., B.A., '99; M.A., 1900; M.D.	1903	(Deceased.)
Hurdman, A. G., M.D.	1901	Ottawa.
17*Hutcheon, Robert J., M.A.	1892	Ottawa.
Hutcheson, James, B.A.	1881	Brockville.
Hutchison, John, M.D.	1886	(Deceased.)
Hutchison, R. A., B.A.	1904	Walsingham.
Hutton, Maurice, (Principal of University College, Toronto) LL.D.	1903	Toronto.
Igoe, O. A., M.D.	1903	Tarrytown, N. Y.
Ikehara, Toshi C., B.A.	1896	Japan.
Ilett, Ambrose E., B.A., '94; M.D	1898	Watertown, N.Y.
Ingall, E. E., B.A.	1903	Trenton H. S.
Ingersoll, Isaac F., M.D.	1863	Picton.
Ingram, J. R., B.A.	1897	Lindsay.
Instant, Reginald A., B.A.	1895	Emerald.
Ireland, Charles F., B.A.	1866	Winnipeg.
1Ireland, F. Archer W., M.A.	1891	New York, U.S.A.
Irvine, William H., B.A., 1877; M.D.	1896	
Irvine, R. W., B.A.	1897	
Irving, Lennox, B.A.	1886	Pembroke.
Irving, Robert M., B.A.	1896	Riverside, Cal.
Irving, William G., B.A.	1894	Riverside, Cal.
Irwin, Arthur W., M.D.	1896	Oswego, N.Y.
Irwin, Chamberlain A., M.D.	1863	(Deceased.)
Irwin, William, B.A.	1896	Stratford.
Jack, George G., M.D.	1886	
Jackson, H. G., B.Sc.	1903	Transcontinental Ry. Survey.
Jackson, V. W., B.A.	1903	O.N.C., Hamilton.
James, Charles, M.D.	1888	Sylvan.
James, Herbert J., M.D.	1893	Bathgate, N. Dakota.
James, Michael, M.D.	1887	Mattawa.
Jamieson, Alexander, B.A.	1863	(Deceased.)
Jamieson, Alison, M.D.	1892	London.
Jamieson, Archibald, M.D.	1886	North Gower.
Jamieson, David, M.D.	1888	Kars.
Jamieson, Georgina, (Huffman) M.A.	1899	Deer Park, Wis.
Jamieson, John, M.D.	1881	(Deceased.)
Jamieson, Thomas J., M.D.	1888	Mountain.
James, E. J., LL.D.	1903	Chicago, Ill.
Jaquith, W. A., M.D.	1898	Auditorium Hotel, Chicago, Ill.

Name.	Date of Graduation.	Address.
Jardine, Robert, B.A., '63; M.A., 1866; B.D.	1886	Chicago, Ill.
Jarvis, Charles E., M.D.	1882	London.
*Jenkins, Ebenezer E., LL.D.	1889	London, Eng.
Jewett, Albert E., B.A.	1890	Chatham, Ont.
Johns, C. P., B.A., 1896; M.D.	1900	Kingston.
*Johnston, Frederick W., B.A.	1886	Washington, N.J.
Johnson, D. B., B.A.	1901	Vancouver, B.C.
Johnson, William, B.A., '49; M.A	1852	(Deceased.)
Johnston, Absolom H. J., M.D.	1862	
Johnston, David A., M.D.	1881	(Deceased.)
Johnston, J. K., M.A.	1899	Calgary, Alta,N.W.T.
Johnston, John W., M.A.	1894	Calabogie.
Johnston, G. L., B.A.	1897	Hamilton.
Johnston, J., B.A.	1897	Calabogie.
Johnston, Joshua R., B.A.	1881	Raleigh, N.C.
Johnston, T. H., M.D.	1900	Drayton.
Johnston, W. A., M.A., 1903; B.Sc.	1905	Athens.
Johnston, William J., M.D.	1891	
Johnstone, David, M.D.	1868	(Deceased).
Johnstone, William H., M.D.	1889	
Joly, Henry G. DeLotbiniere, LL.D.	1894	Victoria, B.C.
Jones, Alfred W., M.D.	1896	
Jones, F. A., B.A.	1905	Ottawa.
Jones, Henry M., M.D.	1866	Marmora.
Jones, John, M.D.	1874	Kemptville.
Jones, L. W., M.D.	1902	Kingston.
*Jordan, W. G., D.D., (Professor, Queen's University)	1899	Kingston.
Joy, Sylvanus, M.D.	1857	Tilsonburg.
Joyner, Noble P., M.D.	1893	(Deceased.)
Judson, George W., M.D.	1879	Lyn.
Judson, H. P., (Vice-President and Head of Political Science Department) LL.D.	1903	Chicago, Ill.
Kahkewaquonaby, M.D.	1866	Hagersville.
Kalbfleish, Frederick H., M.D.	1888	Neustadt.
*Kannawin, William M., B.A., 1896; B.D.	1900	Woodville.
Kay, William, M.A.	1855	(Deceased.)
Kayler, William B., M.D.	1896	Saginaw, Mich.
Kearnes, D. A., M.D.	1903	Ottawa.
Keillor, James, B.A.	1900	Ridgetown.
Keith, Sylvanus, M.D.	1898	New Glasgow, N. S.
Kellock, David, M.D.	1899	

Name.	Date of Graduation.	Address.
Kellock, John D., M.D..	1862	Deceased.)
5, 17Kellock, John McC., M.A....	1892	Riverfield, Que.
Kellock, W. McC., B.A..	1897	Pembroke.
Kelly, David, M.D..	1861	(Deceased.)
Kelly, Edward J., M.D..	1861	(Deceased.)
Kelly, John J., B.A., 1888; M.D..	1892	Sydney, N. S. W.
*Kelly, T. Webster, B.A..	1886	Castorville.
Kelly, W. G., M.D..	1897	Bay City, Mich.
*Kemp Alexander F., LL.D.....	1871	(Deceased.)
Kemp, J. A., M.D..	1861	(Deceased.)
Kemp, James A., M.D..	1892	Indian Head, N.W.T.
3Kemp, W., B.A., 1898; M.A...	1899	Picton.
Kennedy, Alexander, M.D... ...	1876	Port Arthur.
Kennedy, A. H., B.A..	1903	Bath.
Kennedy, Alfred, M.A..	1901	Kingston.
Kennedy, D. B., M.D..	1903	Pembroke.
Kennedy, Jacob B., M.D..	1873	New South Wales.
Kennedy, Jennie M., B.A..	1899	Apple Hill.
Kennedy, John D., B.A..	1885	Pembroke.
Kennedy, John T., M.D...	1891	
Kennedy, Roderick, M.D..	1863	Bath.
Kennedy, T., M.A..	1899	Weston H. S.
Kennedy, T. B., M.D..	1873	
Kennedy, W. A., B.A..	1905	Stratford.
Kennedy, William B., M.D..	1878	Guelph.
Kerfoot, H. W., B.A..	1900	Prescott.
Kertland, Edwin H., M.D..	1865	Toronto.
Keys, S. J., B.A..	1904	Cornwall.
Kidd, A. J., B.A..	1905	Prospect.
Kidd, C. E., B.A..	1903	Prospect.
Kidd, Edward, M.D..	1871	Kingston.
24Kidd, John F., M.D..	1883	Ottawa.
Kidd, William E., M.D..	1891	Oak Park, Ill.
Kidd, William J., B.A..	1887	Ottawa.
Kidd, W. J., B.A..	1903	Prospect.
*Kidd, P. E..	1878	81 St. Mark's Ave., Brooklyn, N.Y.
Kilborn, H. J., M.D..	1899	Oso.
8Kilborn, Omar L., B.A., 1888; M.A., 1889; M.D..	1889	Chentu, China.
Kilborn, Ronald, M.D..	1879	Kingston.
Kilmer. E. E. C., B.A..	1904	Aylmer.
Kincaid, Robert, M.D..	1868	Olympia, Oregon.
Kinkead, E. C., M.D..	1904	Kingston, Jamaica.
King, Francis, B.A., 1889; M.A.	1890	Kingston.
King, W. Wallace, M.A..	1895	Teachers' College, New York.

Name.	Date of Graduation.	Address.
Kingsford, William, C.E., LL.D.	1889	(Deceased.)
Kingsley, Patrick J., M.D.. ..	1894	
Kirk, Fred Jas., B.A., 1888; M.D.	1892	404 Hamburg Ave., Brooklyn, N.Y.
Kirkconnell, Thomas A., B.A...	1894	Port Hope H. S.
Kirkland, W. S., M.A..	1901	Morrisburg.
Kirkpatrick, A. F., (Master of Selwyn Coll., Cambridge), D.D.	1905	Cambridge, Eng.
Kirkpatrick, Charles S., B.A.. ..	1893	Kingston.
*Kirkpatrick, Francis G., B.A...	1891	Lombardy.
Kirkpatrick, Hon. Geo. A., LL.D.	1893	(Deceased.)
Kirkpatrick, Herbert R., B.A....	1895	Montreal.
Kirkpatrick, Guy H., B.Sc., 1897; M.E..	1898	London, Eng.
Knapp, Albert E., B.A..	1895	
11bKnapp, E., M.A..	1905	Battersea.
12Knight, Archibald P., (Professor, Queen's Univ.) B.A., 1872; M.A..	1874	Kingston.
Knight, Cyril W., B.Sc..	1903	Kingston.
Knight, John H., M.D..	1880	Wallaceburg.
Knight, A. S., M.D..	1897	Enfield Centre, N. Y.
Knight, W., B.A..	1905	Belleville.
*Knowles, Robert E., B.A.... ..	1892	Galt.
Knox, Henry, M.D..	1882	(Deceased.)
Knox, W. J., M.D..	1903	Beachburg.
Koyl, Frederick T., M.D..	1882	Ada, Minn.
Koyl, Frank H., M.D..	1888	Hornellsville, N.Y.
Kyle Robert J. M., M.D..	1895	(Deceased.)
Kyle, William A., M.D..	1885	Manotick.
Lafferty, James, M.D..	1871	Calgary, Alberta.
Lafferty, William A., M.D..	1879	(Deceased.)
Laidlaw, Alexander R., M.D.. ..	1857	(Deceased.)
Laidlaw, C., B.A..	1902	Georgetown.
Laidlaw, J. H., B.A., 1900; M.D.	1903	Georgetown.
Laing, Maybelle, B.A..	1904	Kingston.
Laird, Annie L., B.A..	1901	Winnipeg.
Laird, D. H., M.A..	1898	Winnipeg.
*Laird, Robert, M.A..	1893	Vancouver, B.C.
Lake, Charles B., M.D..	1866	Ridgetown.
Lake, E. J., M.D..	1898	Kingston.
Lalonde, A. J., M.D..	1904	Barrie.
Lambert, Robert, M.D..	1859	Windsor.
Lamont, John, B.A...	1890	
Lane, Isaac J., M.D..	1886	North Williamsburg.
Lane, Joseph W., M.D..	1875	Mallorytown.
Lanfear, Henry O., M.D..	1889	Melrose, Ind.

Name.	Date of Graduation.	Address.
*Lang, George R., B.A.	1885	Olds, Alta.
12*Lang, Wm. A., B.A., '73; M.A.	1876	(Deceased.)
14Langford, T. E., M.A.	1898	Shelburne.
*Langill, Paul F., B.A.	1881	Martintown.
Laurier, Wilfred, LL.D.	1898	
*Lavell, Alfred E., B.A.	1892	Ayr.
Lavell, Cecil F., M.A.	1894	Lewiston, Maine.
Lavell, Charles H., M.D.	1873	(Deceased.)
Lavell, Harry A., B.A.	1888	Smith's Falls.
12Lavell, John R., B.A.	1877	Smith's Falls.
Lavell, Michael, M.D.	1863	(Deceased.)
Lavell, William A., M.D.	1881	(Deceased.)
Lavers, Frank C., M.D.	1891	New Ross, N.S.
Lawlor, Michael, M.D.	1857	(Deceased.)
Lawlor, R. G., B.A.	1902	Sydenham.
Lawyer, Annie, M.D.	1888	Ottawa.
Lazier, D. B., M.D.	1901	Camborne.
Leach, G. C., M.D.	1904	Fenelon.
Leahy, Bernard J., M.D.	1894	Point Jarvis, N.Y.
Leask, Harry, B.A.	1888	Sudbury.
Leavitt, Arvin S., M.D.	1869	L'Amable.
Leavitt, Minnie G., M.D.	1893	East Hatley, Que.
*Leckie, N. M., B.A., B.D.	1902	Hamilton.
Lee, R. A., M.D.	1904	Port Hope.
Lees, Richard, M.A.	1891	St. Thomas.
Leitch, G. C., B.A.	1905	Dutton.
*Leitch, James A., B.A.	1892	Eldorado.
Lent, Edwin J., M.D.	1892	South Bend, Ind.
Leonard, A. H., M.D.	1903	Kingston.
Leonard, Raymond A., M.D.	1879	Napanee.
Lesses, M., M.D.	1905	Kingston.
Le Sueur, W. D., LL.D.	1900	Ottawa.
Letellier, A., M.D.	1897	Peterboro.
Lett, Ralph M., B.A.	1889	St. Thomas.
Lewis, Frederick W., M.D.	1878	Orangeville.
*Lewis, Lewis, B.A.	1881	Derby, Eng.
Lewis, L. L., B.A.	1900	
Lewis, T. N., B.A.	1900	Smith's Falls.
Liebner, E. O., B.A.	1902	Orillia.
Lindsay, C. V., M.A.	1900	Toronto.
*Lindsay, John, B.A., '52; M.A.	1854	(Deceased.)
Lindsay, M. A. F., B.A.	1904	Kingston.
Lindsay, Muriel C., B.A.	1905	Portsmouth.
*Lindsay Peter, B.A.	1851	Givens St., Toronto.
4*Linton, Adam, R., B.A., 1881; B.D.	1885	Harrow.
Litchfield, John P., M.D.	1863	(Deceased.)

Name.	Date of Graduation.	Address.
Little, William C., M.D.	1889	Warracknabael, Aus.
*Livingston, John, B.A.	1857	(Deceased.)
Livingstone, John S., M.D.	1888	(Deceased.)
*Livingstone, Peter S., B.A.	1870	(Deceased.)
Livingstone, Marion (Gillen), M.D.	1887	(Deceased.)
*Lochead, Jno. S., B.A., '61; M.A.	1863	North Gower.
Locheed, Lachlin T., B.A.	1888	Toronto.
Lochead, W. M., M.A.	1898	Kawaguchi, Osaki, Ja.
Locke, John A., M.D.	1893	Algonquin.
Locke, M., M.D.	1905	Brinston's Corners.
Lockhart, Alfred J., M.D.	1892	Harrowsmith.
Lockhart, George D., M.D.	1890	King.
Lockhart, Thomas J., M.A.	1892	Cannington.
Lodge, W. L., B.Sc.	1903	Charlottetown, P.E.I.
Lofthouse, William O. R., M.D.	1895	Kingston, Jamaica.
1, 18Logie, William A., B.A., '87; M.A., 1888; LL.B.	1892	Hamilton.
Longmore, H. B., B.A.	1898	Alexandria.
Longwell, A., B.A., 1900; B.Sc.	1903	Foxboro.
Loucks, J. E., B.A.	1901	Frankville.
Loudon, James, President of University College), LL.D.	1894	Toronto.
*Love, Andrew T., B.A.	1878	Quebec.
Lowe, George R., B.A.	1895	Ottawa.
Lowe, W. D., M.A.	1902	Kingston.
*Low, G. J., D.D.	1898	Almonte.
Lowry, Blanche T., B.A.	1903	Kingston.
Lunam, Henry, B.A.	1877	Campbellton, N. B.
Lyle, William D., M.D.	1896	Havana, North Dak.
Lynch, Dennis P., M.D.	1878	Almonte.
Lyon, Horatio V., B.A.	1885	Kingston.
Mabee, C. O., M.D.	1888	
Mabee, James E., M.D.	1887	Odessa.
Mabee, Horace C., B.Sc.	1898	Belleville.
Machar, John M., B.A.	1857	(Deceased.)
Madden, John H., B.A.	1889	E. C. S. Bank Bldg., Buffalo, N.Y.
Mahaffy, F. W., B.A.	1903	Alvinston.
Mahood, A. E., B.A., 1904; M.D.	1905	Kingston.
Mahood, Perry, B.A.	1889	Kingston.
Malcolm, George, B.A.	1894	Stratford.
8Malcolm, L. M., M.A.	1905	Stratford.
Malcolm, William G., M.D.	1893	Chesley.
Malloch, Archibald E., M.D., B.A	1862	Hamilton.
Malloch, Edward G., B.A.	1860	Perth.
Malloch, Eleanor E., B.A.	1904	Hamilton.

Name.	Date of Graduation.	Address.
Malloch, George, B.A.	1865	Arnprior.
Malloch, G. S., B.A.	1902	Hamilton.
Malloch, George W., B.A.	1850	(Deceased.)
Mallory, Charley N., M.D.	1888	Delta.
Malone, Edith, B.A., 1899; M.A.	1900	Kingston.
Malone, E. E., B.Sc.	1904	Draughtsman, Topog. Survey, Ottawa.
Malone, Herb. V., B.A., '94; M.D.	1898	Frankford.
Mann, Alexander, D.D.	1876	(Deceased.)
*Mann, James, M.D.	1869	Renfrew.
Marselis, Eathen H., M.D.	1895	South Finch.
Mark, Robert, M.D.	1867	(Deceased.)
Markle, J. H., B.A.	1902	
Marquis, Thomas G., B.A.	1889	Toronto.
Marshall, D. H. J., B.A.	1904	Campden.
4, 13Marshall, Jno., B.A., 1886; M.A.	1889	Kingston.
Marshall, J. W., B.A.	1898	Windsor C. I.
Marshall, W. F., M.A.	1898	
3Marty, Alletta E., M.A.	1894	176 McLaren St., Ottawa.
3, 4Marty, Sophia E., M.A.	1897	Stratford.
Mason, G. W., M.A.	1902	Mail Bldg., Toronto.
Mason, JamesW., B.A.	1878	(Deceased.)
Mason, W. R., M.D.	1901	Ottawa.
Massie, Agnes M., (Cooper) B.A	1895	Toronto.
Massie, John, M.D.	1865	(Deceased.)
Masson, Thomas, M.D.	1875	Cape Vincent.
Mather, William M., M.D.	1886	Tweed.
Mather, J. F., M.D.	1898	Middleville.
8Matheson, John, Assistant Professor in Mathematics, Queen's University) M.A.	1901	Kingston.
Matheson, Murdoch, M.D.	1870	Waverly, N.S.W.
8Matthews, S. W., M.A.	1897	Vancouver Coll., Vancouver, B.C.
Mattice, William D., B.A.	1847	(Deceased.)
Maudson, William H., B.A.	1896	(Deceased.)
Maudson, G. A., B.A.	1898	(Deceased.)
Mavety, Alexander C., M.D.	1889	
Maxwell, William J., M.D.	1888	(Deceased.)
5May, H. P., B.A.	1905	Little Current.
*May, John, B.A., 1857; M.A.	1861	Franktown.
Maybee, Curtis O., M.D.	1888	New Providence, Io.
Maybee, Millard, M.D.	1887	Riverside, Cal.
Meacham, George P., M.D.	1891	
Meade, Robert, M.A.	1897	Brockville.

Name.	Date of Graduation.	Address.
Meadows, R. W., M.D.	1862	H. M. Service.
Meagher, Daniel, M.D.	1867	Montreal.
Meek, C. F., M.D.	1900	New Baltimore, Mich.
*Meikle, William, B.A.	1881	Glace Bay, N.S.
Meiklejohn, A. J., B.A.	1898	Dundas.
Mellon, P. B., M.D.	1901	Queen St., Ottawa.
Mellow, L. E., M.D.	1902	Sillsville.
Mellow, Samuel J., M.D.	1886	Port Perry, Ont.
Melleville, Edmond J., M.D.	1892	Bakersville, Vt.
Menish, Janet I.,(Kannawin) B.A	1895	Woodville.
Menzies, R. D., B.A., 1895; M.A., 1896; M.D.	1899	Rosemeath.
Mercer, John G., M.D.	1855	(Deceased.)
Merrill, J. Ward, B.A., '99; M.D.	1902	Ottawa.
Merriman, Wellington H., M.D.	1895	Latimer.
Merritt, C. P., B.Sc.	1899	(Deceased.)
Metcalfe, Archibald A., M.D.	1896	Almonte.
Michell, Kathleen M., B.A.	1905	Perth.
Might, L., M.A.	1904	Kingston.
*Millar, J. F., B.A.	1899	Blakeney.
Miller, Eva M., B.A.	1902	Woodstock C. I.
Miller, F., B.A.	1904	Avening.
Miller, James D., B.A.	1896	
*Miller, J. H., B.A.	1904	Toronto.
Miller, James L., B.A.	1896	Byng Inlet.
*4Miller, John M., B.A., 1890; M.A.	1891	Nanaimo, B.C.
Miller, John, B.A.	1886	Toronto.
Miller, John C. S., M.D.	1890	Seattle, Wash.
Miller, Lindsay F., M.D.	1877	Toronto.
Miller, Thomas, B.A.	1852	(Deceased.)
Miller, Thomas, B.A., M.D.	1854	Hamilton.
*Milligan, G. M., (D.D.), B.A., 1862; LL.D.	1903	Toronto.
Milliner, William S., M.D.	1864	(Deceased.)
Millions, Edna M., (Mrs. J. C. Conn) B.A.	1901	Napanee.
Mills, Hon. David, LL.D.	1901	(Deceased.)
Mills, Rhoda, B.A.	1898	Cataraqui.
*Mills, Rt. Rev. Bishop, LL.D.	1901	Kingston.
Mills, John H., B.A., 1889; M.A.	1890	Waterford H. S.
Mills, Mabel V., B.A.	1901	Kingston.
Mills, Martha C., B.A.	1896	Oshawa H. S.
*Mills, William G., B.A.	1885	New Westm'ter, B.C.
*Milne, James W. H., B.A.	1887	Ottawa.
Milne, M. R., B.A.	1903	Kingston.
3Minnes, Robert S., B.A., 1889; M.A., 1890; M.D.	1893	Metcalfe St., Ottawa.

Name.	Date of Graduation.	Address.
Minor, Silas, M.A.	1865	(Deceased.)
1, 2Misener, Geneva, M. A.	1899	Niagara Falls.
Mitchell, Charles F., M.D.	1890	Cleveland, Ohio.
Mitchell, Elizabeth, M.D.	1888	Montreal, Que.
Mitchell, G. A., B.A.	1899	Shadeland, Man.
2Mitchell, Geo. W., B.A., 1885; M.A.	1891	Cobourg.
Mitchell, Harry F., M.D.	1889	South Bend, Ind.
Mitchell, J., M.D.	1899	Gladstone, Mich.
Mitchell, Joel W., B.A.	1894	Lansdowne.
8Mitchell, Alfred S., M.A., (Professor Columbia College)	1894	Columbia Univ., New York.
Mitchell, J. V., B.A.	1903	Lansdowne.
Moffat, Wm., M.A., 1894; M.D.	1898	Utica, N.Y.
Montgomery, Fannie L., B.A.	1904	Kingston.
Montgomery, O. M., B.Sc.	1905	Lanark.
Montgomery, W. H., B.A.	1905	De Grasse, N.Y.
Mooers, Henry F., B.A.	1895	Kingston.
Mooney, Thomas T., M.D.	1896	Rochester, N. Y.
Moore, Andrew, M.D.	1863	(Deceased.)
Moore, H. M., M.D.	1903	Athens.
*Moore, John, B.A.	1881	Burnbrae.
Moore, John, M.D.	1891	Plainfield.
11Moore, Jas. R., B.A., '94; M.A.	1896	Kemptville H. S.
Moore, Margret B., B.A.	1904	Avonmore.
Moore, R. G., M.D.	1902	Belleville.
Moore, Thomas A., M.D.	1883	Westville, N.S.
Moore, Vincent H., M.D., 1870; LL.D.	1903	(Deceased.)
Morden, Frederick W., M.D.	1894	(Deceased.)
Morden, Gilbert W., B.A., 1888; M.A.	1905	Picton.
Morden, James B., M.D.	1865	(Deceased.)
Morden, John H., M.D.	1859	(Deceased.)
Morden, Wilson S., B.A., 1888; LL.B.	1894	Belleville.
Morden, J., B.A.	1900	Kingston.
Mordy, Alfred A., M.D.	1882	(Deceased.)
*Mordy, John, B.A., 1875; M.A.	1878	Oklahoma.
Morgan, Edward M., M.D.	1890	Westmount, Que.
Morgan, J., B.A.	1900	
Morris, Alexander C., B.A.	1882	Toronto.
Morris, William, B.A.	1882	Toronto.
Morrison, A. S., B.A.	1898	Hanover.
Morrison, C. A. O., M.D.	1898	Kingston.
Morison, D. W., B.A., D.D.	1903	Ormstown, Que.

Name.	Date of Graduation.	Address.
*Morrison, Judge Duncan, B. A., 1866; M.A.	1868	(Deceased.)
Morrison, Duncan, B.A.	1862	Owen Sound.
8Mortin, Alice, (Byrnes) M.A.	1899	Gore Bay.
Mostyn, William, M.D.	1858	(Deceased.)
Mowat, Herbert M., B.A., 1881; LL.B.	1886	Toronto.
*Mowat, John B., (Professor, Queen's University) D.D., B.A., 1845; M.A.	1847	(Deceased.)
Mowat, John McD., B.A.	1895	Kingston.
Mowat, Sir Oliver, LL.D.	1872	(Deceased.)
Moxley, C. R., M.D.	1905	Kingston.
Muckleston, John S., B.A.	1865	Revelstoke.
5Mudie, Ethel, B.A.	1899	Kingston.
Mudie, John, B.A.	1863	Kingston.
Muir, Alexander, B.A.	1851	Toronto.
Muir, James, B.A.	1861	Calgary.
*Muir, Jas. B., B.A., 1865; M.A.	1869	(Deceased.)
*Muir, James C., D.D.	1858	(Deceased.)
*Muir, Peter D., B.A.	1856	(Deceased.)
*Muirhead, John W., B.A.	1891	(Deceased.)
Muldrew, William H., B.A.	1895	Orillia.
Mullan, Nathaniel S., B.A.	1885	New York.
Mundell, Alma E., B.A.	1902	Kingston.
Mundell, David E., (Prof., Queen's Univ.) B.A., 1883; M.D.	1886	Kingston.
Mundell, John, M.D.	1886	Kingston.
Mundell, William, B.A.	1875	Kingston.
Munroe, A. T., M.D.	1904	Moose Creek.
Munro, David, M.D.	1867	Perth.
Munro, John C., M.D.	1867	(Deceased.)
*Munro, J., B.A.	1897	Trail, B.C.
Munro, H. B., B.A.	1898	Almonte.
Munro, Maggie B., B.A.	1905	Iroquois.
Munro, Maud E., B.A.	1899	Perth.
Munro, M. F., B.A.	1904	Lancaster.
1, 2, 18Munro, P. F., B.A., 1899; M.A.	1905	Aylmer.
5, 25Munro, William B., (Prof., Harvard University) M.A., 1896; LL.B.	1896	Cambridge, Mass.
Munro, W. A., B.A.	1902	Chesterville.
25Murphy, G. B., B.A.	1904	Brockville.
5Murphy, Isabella, M.A.	1901	Antrim.
Murphy, John B., M.D.	1876	Brockville.
Murphy, Joseph E., M.D.	1893	Pakenham.
Murphy, W. S., B.A., 1901; M.D.	1903	Portland.

Name.	Date of Graduation.	Address.
11Murray, D. C., M.A.	1901	Newton.
Murray, Herbert G., M.D.	1896	Owen Sound.
*Murray, Isaac, D.D.	1876	New Glasgow, N.S.
*Murray, James, B.A., 1882; B.D.	1884	Toronto.
Murray, Janet, M.D.	1891	Schenectady.
Murray, J. C., B.Sc.	1901	New Londonderry, N. S.
*Murray, Robert C., B.A.	1882	(Deceased.)
Murray, Minnie (Chown), M.A.	1893	Renfrew.
Murray, May L., B.A.	1897	Kingston.
Murray, Walter C., (Professor of Philosophy, Dalhousie College and University) LL.D.	1903	Halifax, N.S.
Myers, Ambrose R., M.D.	1894	Moncton, N. B.
Mylks, G. W., M.D.	1897	Kingston.
Mylks, L. E., M.D.	1903	Glenmore.
Macadam, Samuel J., M.D.	1873	
*Macalister, John M., B.A.	1865	Iroquois.
Macalister, Ursilla, M.A.	1900	Glencoe H. S.
Macarthur, Dunçan, B.A.	1878	Ailsa Craig.
*Macarthur, George, B.A.	1881	Cardinal, Ont.
Macarthur, James, B.A., 1875; M.D.	1878	London.
Macarthur, John A., B.A.	1880	Davenport, Wash. Ter.
McArthur, J. H., B.A., 1895; M.D	1897	East Barre, Vt.
*McAuley, Alexander, B.A.	1883	Mitchell.
*Macauley, Evan, B.A.	1864	Ottawa.
Macauley, W. B. T., B.A.	1892	Montreal.
McBain, Alex., B.A., 1860; M.A.	1862	(Deceased.)
McBean, Alexander G., B.A.	1865	Montreal.
McBean, D. D., LL.D.	1905	New York City.
McBroom, James A., M.D.	1895	Brockville.
McCabe, A., M.D.	1903	Gloucester, Mass.
McCaig, James, B.A., LL.B.	1895	Lethbridge, Alta.
7McCallum, Judge Archibald B., B.A., 1880; M.A.	1881	Manitoulin Island.
McCallum, H. E., B. A., 1900; B.Sc.	1903	Kingston.
McCallum, J. A., B.A.	1899	Brewer's Mills.
McCallum, S., B.A.	1904	Brewer's Mills.
McCambridge, C. J., M.D.	1898	Kingston.
McCambridge, J. E., M.D.	1903	Kingston.
McCammon, C. G., M.D.	1884	(Deceased.)
McCammon, Fred J., B.A., 1889; M.D.	1892	New York.
McCammon, James, M.D.	1863	(Deceased.)
McCammon, James A., M.D.	1879	Gananoque.
McCammon, Samuel H., M.D.	1888	Kingston.

Name.	Date of Graduation.	Address.
*McCannell, Donald, B.A.	1878	(Deceased.)
McCardel, Edward, M.D.	1886	Australia.
McCarthey, A. W., M.D.	1897	
McCarthy, D. M., M.D.	1903	Kingston.
*McCaul, James, B.A.	1859	Toronto.
11McClement, William T., B.A, 1888; M.A.	1889	Armour Ins., Chicago.
McColl, Angus, D.D.	1896	(Deceased.)
McColl, Allan E., B.A., '85; M.D.	1891	Belleville.
*McColl, Evan C. W., B.A.	1886	
7McColl, James A., M.A.	1895	Campbellford.
17, 25McConachie, J. C., B.A., 1903; B.D.	1905	Demorestville.
McConkey, Katherine M. R., B.A.	1903	Brockville.
McConnell, Benjamin J., M.D.	1881	Morden, Man.
*McConnell, J. A., B.A., 1900; B.D.	1903	Roslin.
McConville, A., M.D.	1900	Kingston.
McConville, Isobel, M.D.	1889	Kingston.
McCormack, Joseph, B.A.	1879	
McCormack, M., B.A.	1901	Crieff.
McCormack, S. G., M.A.	1903	Lyn.
McCracken, John I., B.A.	1874	Ottawa.
McCrea, H. H., M.D.	1899	Easton's Corners.
McCreary, Robert N., M.A.	1895	Carleton Place.
McCrimmon, Annie L., B.A., (Purvis)	1902	Rosthern, Sask.
McCuaig, Herbert M., B.A.	1884	Welland.
McCuaig, John A. E., M.D.	1891	Daneville, P. A.
McCullagh, R. J., B.A.	1902	Cobourg.
McCulloch, Andrew, B.A., 1871; M.A.	1874	Port Arthur.
McCulloch, J., M.D.	1901	Port Perry.
McCullough, F. C., M.D.	1904	Boston, Mass.
McCullough, Thomas P., M.D.	1888	Dundalk.
McCullough, William S., M.D.	1875	(Deceased.)
McCutcheon, J. M., B.A.	1905	St. Thomas.
McCutcheon, William C., M.D.	1894	Cassopolis, Mich.
McDermott, M. F., M.D.	1897	Kingston.
McDiarmid, S. S. R., B.Sc.	1903	Topog. Survey, Ottawa.
Macdonald, A., M.D.	1901	
*Macdonald, Alexander, B.A.	1861	Napanee.
Macdonald, Alexander R., M.D.	1857	Brighton.
McDonald, A. T., M.D.	1903	Williamstown.
McDonald, Charles, V.P.A.S.E., LL.D.	1894	New York.
*Macdonald, Clinton D., B.A.	1886	Grafton, N.Dak. USA

Name.	Date of Graduation.	Address.
Macdonald, Colin, B.A.	1855	(Deceased.)
*Macdonald, Donald, B.A.	1854	(Deceased.)
*Macdonald, Duncan, B.A., 1859; M.A.	1863	Strathcona, Alta.
4Macdonald, George, B.A., 1878; B.Sc.	1878	(Deceased.)
McDonald, H. A., M.D.	1904	Sunbury.
Macdonald, Herbert S. Judge, B.A., 1859; M.A.	1861	Brockville.
Macdonald, Hugh N., M.D.	1882	Whycocomagh, N. S.
McDonald, Hugh S., B.A., 1891; M.D.	1895	Dresden.
Macdonald, J., B.A.	1905	Deseronto.
7, 25Macdonald, J. F., M.A.	1899	Carleton Place H. S.
MacDonald, Jas., M.A.		Williamstown H. S.
2McDonald, James, M.A.	1892	Picton.
*McDonald, John A., B.A.	1888	Pittsburgh.
Macdonald, Sir John A., LL.D.	1863	(Deceased.)
Macdonald, John A., M.D.	1862	(Deceased.)
Macdonald, John F., M.D.	1896	Kilkenny, Minn.
McDonald, J. M., B.A.	1903	Orangeville.
*Macdonald, Kenneth J., B.A., 1894; B.D.	1896	Forest.
Macdonald, Nerva D. (Burns), B.A.	1894	Stirling.
Macdonald, Norval, B.A.	1900	Kingston.
Macdonald, Patrick A., B.A.	1876	Winnipeg.
*McDonald, Wm., B.A., '98; B.D	1901	Mountain.
Macdonnell, Æneas J., B.A.	1884	Ottawa.
*Macdonnell, Daniel J., B.D., B.A., 1858; M.A.	1860	(Deceased.)
1, 2Macdonnell, George F., M.A.	1893	Toronto.
Macdonnell, George M., B.A.	1860	Kingston.
McDonnell, Hector, M.D.	1893	(Deceased.)
Macdonnell, J. A., M.D.	1862	
2Macdonnell, James M., M.A.	1905	Kingston.
*Macdonnell, Logie M., B.A., 1902; M.A.	1904	Hamilton.
19Macdonnell, James S., M.A.	1899	Pasadena, Cal.
Macdonnell, John M., B.A.	1868	(Deceased.)
McDonnell, J. J., M.D.	1903	St. Andrews West.
McDougall, Colin A., B.A.	1895	St. Thomas.
9McDougall, F. H., B.A., 1902; M.A.	1903	Maxville.
McDougall, James B., B.A.	1896	North Bay H. S.
6McDougall, L. M., M.A.	1905	Brockville.
McDowell, Charles, B.A.	1877	Renfrew.
McDowell, James A., B.A.	1867	(Deceased.)

Name.	Date of Graduation.	Address.
McDowall, J. L., M.D.	1903	Kingston.
MacEachern, E. G. D., B.A.	1905	Desbarats.
6McEachran, J. M., M.A.	1902	Glencoe.
McEwen, Alexander D., M.D.	1895	Hulbert.
McEwen, Ewen, M.D.	1887	Singhampton.
McEwen, G. G., M.A.	1903	Lakeport.
*McEwen, Jas., B.A., '52; M.A.	1854	
McEwen, John, B.A.	1887	Smith's Falls.
McEwen, J. S., B.A.	1897	Carleton Place.
McFadden, Murdock, M.D.	1880	Mount Forest.
*Macfarland, John F., B.A.	1890	Warkworth.
Macfarlane, Andrew K. H., B.A.	1888	Vancouver, B.C.
7McGaughey, G. A., M.A.	1900	Deseronto.
McGhie, George S., M.D.	1883	Elgin.
McGibbon, A. A., M.A.	1898	Hawkesbury.
*McGillivray, Alexander, D.D.	1858	(Deceased.)
8McGillivray, Alice, M.D.	1884	Hamilton.
*McGillivray, Daniel, B.A.	1864	Lunenberg, N. S.
McGillivray, Farquhar, B.A.	1852	Ottawa.
Macgillivray, Florence, B.A.	1905	Kingston.
*McGillivray, Malcolm, B.A., '72; M.A., 1874; D.D.	1903	Kingston.
McGillivray, Neil J., B.A.	1847	(Deceased.)
Macgillivray, T. D., B.A., 1902; M.D.	1905	Kingston.
McGillivray, T. Shannon, M.D.	1888	Hamilton.
McGillivray, Wm., B.A.	1864	
McGonigle, M., M.D.	1904	Newboro.
McGrath, Edward, M.D.	1888	Peterboro.
McGrath, George, M.D.	1893	Hamilton, Mon.
McGrath, Michael E., M.D.	1889	Chicago.
McGreer, C. G., B.A., 1901; M.D.	1903	Napanee.
Macgregor, Annie K., B.A.	1905	Almonte.
McGregor, D. A., B.A.	1905	Tiverton.
Macgregor, Grace C., B.A.	1905	Almonte.
McGregor, James G., M.D.	1895	Martintown.
McGregor, Peter C., B.A., 1866; LL.D.	1901	Almonte.
*McGregor, P. G., D.D.	1876	(Deceased.)
McGuire, J., M.A.	1902	Almonte H. S.
12McGuire, Thos. H., B.A., Judge	1870	
23McGuirl, Thomas H., B.A.	1886	Ottawa.
McGurn, Joseph S., M.D.	1881	(Deceased.)
MacIlquham, W. L., B.Sc.	1905	Lanark.
*McIlroy, William A., B.A.	1898	Ottawa.
MacInnes, John A., B.A.	1895	(Deceased.)
MacInnes, Charles R., M.A.	1896	Johns Hopkins Univ., Baltimore, Md.

Name.	Date of Graduation.	Address.
MacInnes, W. H., B.A., 1902; B.D.	1905	Vankleek Hill.
McIntosh, Colin, B.C.L., LL.B.	1896	Carleton Place.
McIntosh, Grace A., B.A.	1896	Vancouver, B. C.
McIntosh, G. E., M.D.	1903	Kingston.
3*McIntosh, James W., B.A., '93; M.A.	1894	
McIntosh, Wm. D., B.A.	1892	Carleton Place.
McIntosh, Alexander, B.A.	1897	Alexandria.
*McIntosh, J. A., B.A.	1902	Minden.
McIntosh, P. A., B.A., 1902; M.D.	1905	Dundela.
McIntyre, Alex., B.A.	1898	Winnipeg.
Macintyre, A. D., M.D.	1901	Glencoe.
12McIntyre, Donald M., B.A.	1874	Kingston.
McIntyre, D. N., B.A.	1903	Belleville.
McIntyre, Duncan, M.D.	1864	Glencoe.
MacIntyre, J. M., B.A.	1903	Phoenix, Ariz.
McIntyre, John, B.A.	1847	(Deceased.)
McIntyre, John, B.A., 1861; M.A.	1872	Kingston.
*McIntyre, W. C., B.A.	1898	Newington.
McJanet, J., B.A.	1900	Albert St., Ottawa.
McKay, D. A., B.A.	1901	Markham H. S.
McKay, Donald G., B.A.	1865	(Deceased.)
*McKay, George L., D.D.	1880	(Deceased.)
McKay, John, B.A.	1888	Sault Ste. Marie.
MacKay, J. M., B.A.	1905	Kintore.
12, 20McKay, Matthew W., B.A.	1879	Pembroke.
McKay, R. B., B.Sc.	1904	Assayer, Pioneer Mine, Slocan, B.C.
*McKay, Roderick, B.A., 1881; B.D.	1886	Maxville.
*McKay, William E., B.A.	1856	(Deceased.)
8McKechnie, J. B., M.A.	1903	Wiarton.
8McKechnie, J. H., B.A., 1901; M.A.	1902	Waterford H. S.
McKechnie, W., M.D.	1902	Elmside, Que.
McKee, M. Lillian, B.A.	1900	Peterboro.
*McKee, William, B.A.	1872	Alliston.
McKellar, Dugald, M.D.	1855	(Deceased.)
McKellar, Kate, B.A.	1904	Hamilton.
McKellar, Margaret, M.D.	1890	Neemuch, India.
McKenty, James, M.D.	1890	Gretna, Dakota.
McKenzie, Andrew, M.D.	1862	(Deceased.)
*McKenzie, Archibald, B. A., '88 B.D.	1892	Douglas.
*Mackenzie, Archibald A., B.A., '77; B.Sc., '77; M.A., '88; D.Sc.	1896	Osaki, Japan.

Name.	Date of Graduation.	Address.
McKenzie, Edward, M.D.	1860	Smith's Falls.
MacKenzie, G. C., B.Sc.	1903	Brantford.
McKenzie, John A., Judge, B.A.	1856	Sarnia.
4McKenzie, Malcolm, B.A., '87; M.A.	1894	McLeod, Alta.
*McKenzie, D. A., B.A.	1898	Bishop's Mills.
McKeown, Henry A., M.D.	1895	Belleville.
McKeracher, D. A., B.A.	1903	Dutton.
*Mackerras, John H., B.A., 1850; M.A.	1852	(Deceased.)
Mackerras, R. H., M.D.	1903	Kingston.
Mackie, David H., M.D.	1884	New York.
Mackie, F. H., B.Sc.	1903	Oshawa.
*Mackie, Rev. John, D.D.	1903	Kingston.
Mackie, T. A., M.D.	1896	Kemptville.
McKillop, Alexander, B.A.	1877	Montreal.
*McKillop, Charles, B.A.	1875	Raymond, N. W. T.
McKillop, James T., M.D.	1889	(Deceased.)
McKinley, W. W., M.D.	1903	Kingston.
*McKinnon, Alex. D., B.A., 1894; B.D.	1897	Boston, Mass.
*MacKinnon, A. G., B.A.	1900	Dak River, Man.
MacKinnon, D. L., M.D.	1905	Lake Ainslie, N.S.
*MacKinnon, H. L., B.A., 1897; B.D.	1900	Lake Ainslie, C.B.
*McKinnon, John, B.A., 1886; M.A., 1889; B.D.	1889	Springbank.
*McKinnon, John, B.A., '94; B.D	1897	Mira, C.B.
*McKinnon, Malcolm, B.A.	1885	Weston.
6*Mackinnon, M. A., B.A., '97; M.A.	1900	Halifax.
*MacLachlan, Alexander, B.A.	1884	Smyrna, Turkey.
McLaren, Alexander, M. D.	1865	Lancaster.
McLaren, A. F., M.D.	1897	Cornwall.
Maclaren, C. H., B.A.	1902	Ottawa.
*McLaren, Ebenezer D., B.A., '70; M.A., 1873; B.D., 1873; D.D.	1901	Toronto.
McLaren, James, B.A.	1850	Nelson, O.
McLaren, John, B.A.	1856	(Deceased.)
12McLaren, J. B., B.A., '76; M.A.	1878	Winnipeg, Man.
McLaren, Peter, B.A.	1854	(Deceased.)
McLaren, Peter, LL.D.	1868	(Deceased.)
McLaren, Peter, B.A.	1866	Ormstown, Que.
McLaren, T. C., M.D.	1903	Osceola.
McLaren, T. O., M.D.	1902	Lancaster.
*McLaren, Wm., (Prof., Knox College), D.D.	1883	Toronto.
7McLaren, W. W., M.A., 1899; B.D.	1902	Picton.

Name.	Date of Graduation.	Address.
McLaughlin, Edward, M.D.	1886	Morrisburg.
*McLean, A., D.D.	1903	Blyth.
*McLean, Alexander, B.A.	1878	(Deceased.)
McLean, Allan Ed., B.A.	1899	Cornwall H. S.
McLean, Caird R., M.D.	1859	(Deceased.)
Maclean, Donald, M.D., LL.D.	1893	(Deceased.)
*McLean, Donald J., B.A.	1855	Arnprior.
McLean, Ernest H., M.D.	1891	Revelstoke.
*McLean, James M., B.A.	1887	Chatham, N. B.
McLean, James R., B.A.	1894	Arnprior.
McLean, Katherine G., B.A.	1896	Arnprior.
MacLean, Lauchlin H., B.A.	1894	Port Hastings, C. B.
*Maclean, Matthew W., B.A., 1869; M.A.	1872	Arlington Beach, Assa.
McLean, N. J., B.A.	1899	Pembroke.
19McLean, R. A., B.A.	1903	Smith's Falls.
McLean, Solomon C., M.D.	1874	Spencerville.
McLean, Thomas F., M.D.	1863	(Deceased.)
McLellan, James A., M.D.	1891	Economy, N. S.
McLennan, A. L., B.A.	1897	Tilsonburg.
*MacLennan, Alexander, B.A.	1857	(Deceased.)
*MacLennan, Alex. K., B.A., '91; B.D.	1894	Boston, Mass.
McLennan, Alexander S., M.D.	1873	Chicago, Ill.
Maclennan, Donald B., K.C., B. A., 1857; M.A.	1861	Cornwall.
Maclennan, Donald, B.A., 1848; M.A.	1852	
McLennan, Donald R., M.D.	1897	Cornwall.
McLennan, Duncan N., M.D.	1891	Port Hope.
McLennan, Elizabeth, B.A.	1899	Lancaster.
Maclennan, Finlay M., B.A.	1879	(Deceased.)
*McLennan, G. B., B.A.	1901	Walkerton.
Maclennan, Hon. Mr. Justice Jas., B.A., 1849; LL.D.	1885	Toronto.
McLennan, J. D., B.A., B.Sc.	1902	Draughtsman, Topog. Survey, Ottawa.
Maclennan, James J., B.A.	1887	Toronto.
Maclennan, John, Sheriff, B.A.	1855	Lindsay.
*Maclennan, Ken., B.A., '49; M.A	1868	(Deceased.
McLennan, K. R., B.Sc.	1904	Draughtsman, Topog. Survey, Ottawa.
Maclennan, Roderick J., B.A.	1884	Toronto.
*Maclennan, Wm., B.A., '64; M.A	1866	(Deceased.)
6McLeod, Alexander, B.A.	1883	Morden, Man.
McLeod, J. A. F.	1854	(Deceased.)

Name.	Date of Graduation.	Address
*McLeod, John, B.A..	1883	(Deceased.)
McLeod, K. C., B.A..	1905	Golspie.
McLeod, Lola, B.A..	1904	Kingston.
McLeod, Norman, B.A..	1905	Dunvegan.
4, 7, 15, 17, *McLeod, Peter A., B.A., 1887; M.A., 1890; B.D.	1892	
McMahon, James, M.D..	1873	Texarkana, Texas.
McManus, Emily, M.A..	1894	Chesley.
McManus, John P. C., M.D.. ..	1897	Bath.
Macmilan, Duncan, Judge, B.A..	1857	Cayuga.
McMillan, A., B.A..	1899	Beulah, Man.
MacMillan, A. D., M.D..	1905	Finch.
MacMillan, A. E., M.D....	1903	Sydenham.
McMillan, Hugh H., B.A..	1880	Dakota.
*McMillan, J., D.D., B.A., 1862; B.D..	1865	Halifax.
*McMorine, John, D.D..	1865	(Deceased.)
*Macmorine, Jno. K., B.A., 1859; M.A., 1863; (Rector of St. James' church) D.D..	1903	Kingston.
*Macmorine, Sam., B.A., 1865; M.A..	1872	Portage la Prairie.
*McMullen, Andrew J., B.A.. ..	1893	Merrickville.
McMurchy, Archibald, M.D.. ..	1883	North Bay.
McMurchy, Archibald, B.A.. ..	1875	Nipissing.
McNab, A. J., B.A., B.Sc..	1902	Douglas.
4McNab, Eliz. M., B.A., '01; M.A.	1902	Douglas.
*Macnab, Findlay F., B.A..	1859	Arnprior.
McNab, George G., M.A..	1902	Renfrew.
McNab, Robert C., B.A..	1896	Renfrew.
McNaughton, Elizabeth, M.A...	1900	Cornwall.
*Macnaughton, James P., B.A...	1884	Smyrna, Turkey.
McNee, J. E., M.D..	1891	(Deceased.)
Macnee, James H., B.A....	1885	Kingston.
Macnee, Peter C., B.A..	1873	Picton.
MacNeill, W. K., B.Sc..	1903	Embro.
McNichol, Eugene C., M.D..	1877	Cobourg.
McPhaden, Murdoch M., M.D..	1880	
McPhail, A. C., B.A..	1899	Almonte.
*McPhail, Donald G., B.A..	1889	Frank, N.W.T.
Macphail, J. G., B.A., 1903; B.Sc...	1905	Orwell, P.E.I.
*McPhayden, Hugh, B.A..	1881	Manilla.
Macpherson, Alexander J., M.D.	1862	(Deceased.)
McPherson, Charles F. S., M.D.	1896	Prescott.
Macpherson, Hattie G., B.A.. ..	1897	Prescott.
Macpherson, Hector, B.A..	1903	Agassiz, B.C.
Macpherson, Henry, B.A..	1851	(Deceased.)
Macpherson, Jas. P., B.A., 1857;		

Name.	Date of Graduation.	Address.
M.A..	1865	Ottawa.
Macpherson, Mary C., B.A..	1900	Hamilton.
*McPherson, Neil, B.A., 1889; M.A., 1891; B.D...	1894	Indianapolis, Ind.
McPherson, Norman A., B.A...	1889	
McPherson, R. J., B.A..	1898	Kincardine.
McPherson, Wallace A., B.A....	1891	(Deceased.)
McPherson, William A. A., M.D.	1891	Prescott.
Macpherson, W. E., LL.B..	1898	Prescott.
McQuarrie, Alexander R., B.A..	1862	
*McQuarrie, W. J., B.A..	1904	West Bay, C.B.
Macqueen, M. A., B.A..	1903	Orwell, P.E.I.
14McRae, A. D., B.A., 1900; B.Sc.	1902	Kingston.
*Macrae, Donald, D.D..	1880	Calgary.
McRae, Donella M., B.A..	1900	Perth.
McRae, Thomas W. R., B.A....	1886	Westmount, Que.
McSporran, J. A., B.A..	1902	London, Ont.
*McTavish, Alexander, B.A.. .. 6, 17, 20, 24, *McTavish, D., B.A., 1881; M.A., 1882; D.Sc.....	1881 1885	Carnduff, Assa. Toronto.
McTavish, Duncan B., Judge, B. A., 1870; M.A..	1873	Ottawa.
McVety, Albert F., M.D..	1886	Toledo, Ohio.
McVicar, John, B.A...	1897	Harrietsville.
*Nairn, Robert, B.A...	1879	
Nash, P. I., M.D..	1902	Kingston.
*Neill, Robert, D.D..	1872	(Deceased.)
Neill, Rev. John, D.D..	1904	Toronto.
Neilson, Bertha, B.A..	1896	Wilton.
Neish, A. C., B.A., 1898; M.A..	1900	Columbia Univ., New York.
Neish, James, M.D...	1865	Port Royal, Jamaica.
Neish, George J., M.D..	1890	Bath, Jamaica.
Neish, William D., M.D..	1887	Old Harbor, Jamaica.
Neish, James, M.D..	1897	Kingston, Jamaica.
Neish, D. B., M.D..	1897	Port Royal, Jamaica.
*Nelles, Samuel S., D.D...	1861	(Deceased.)
Nelson, John, B.A..	1899	Kemptville H. S.
Nesbit, Edward, M.D..	1868	(Deceased.)
Neville, K. P. R., B.A., '96; M.A.	1897	Univ. of Ill., Urbana, Ill.
Neville, M. J., M.D..	1893	Brooklyn, N.Y.
Newlands, George, M.D...	1879	Seattle, U. S.
Newlands, Isaac, B.A..	1884	Buffalo, N. Y.
Newman, George E., B.A..	1891	Brighton, H. S.
Newton, John, M.D..	1866	Deseronto.
5Newton, Meta, B.A..	1902	Deseronto.
Nichol, C. O., B.A..	1905	Hamilton.

Name.	Date of Graduation.	Address
*Nicholson, Alex. B., (Professor, Queen's University), B.A...	1867	Kingston.
Nickle, William F., B.A..	1892	Kingston.
Nicol, James, M.D..	1863	(Deceased.)
Nicol, Jennie (McKelvey), B.A.	1893	(Deceased.)
8, 11, 14, 23Nicol, Wm., Prof., Mining School), B.A., 1883; M.A.... ....•.	1889	Kingston.
Nicolle, F. R., B.A..	1903	Kingston.
*Nimmo, John H., B.A., 1869; M.D..	1886	Detroit, Mich.
Nimmo, H. M., B.A..	1898	Detroit, Mich.
Nisbet, David A., B.A..	1892	Newburgh H. S.
Nish, James, D.D..	1880	(Deceased.)
*Niven, David P., B.A..	1867	St. Catharines.
Noble, D. S., B.Sc..	1902	War Eagle Mine, Rossland, B.C.
Noel, John V., B.A..	1863	(Deceased.)
Norris, Isaac T., B.A..	1894	Ottawa.
8Norris, James, M.A..	1893	Walkerton H. S.
North, Edwin, B.A..	1896	Young's Point.
Northmore, Harold S., M.D.. ..	1889	Bath.
Nugent, Andrew, B.A..	1876	(Deceased.)
Nugent, A., B.A., 1897; M.D....	1899	Dhar, Central India.
O'Connor, C. E., M.D..	1898	Kingston.
O'Connor, Charles, B.A..	1890	Ottawa.
O'Connor, Michael J., LL.B.. ..	1892	
Odell, Henrietta (Laird), B.A..	1895	Vancouver, B.C.
Odlum, John, M.D..	1880	Woodstock.
Ogilvie, H. G., M.D..	1899	Kingston, Jamaica.
Ogilvie, Nettie, M.D.,(Oughten)	1888	Kingston, Jamaica.
O'Hagan, T. F., M.D..	1900	Fort William.
O'Hara, Margaret, M.D. (Medical Missionary)..	1891	Dhar, India.
O'Hara, J. J., M.D..	1898	Alma City, Minn.
Oldham, Edmund, M.D..	1881	Chatsworth.
Oldham, John H., M.D..	1891	Yarker.
Oliver, Alfred S., M.D..	1863	(Deceased.)
Oliver, John K., M.D..	1868	(Deceased.)
Oliver, Marion, M.D. (Medical Missionary)..	1886	Indore, India.
O'Loughlin, Robt. S., B.A., 1865; M.A..	1874	Butterick Pub. Co., New York.
O'Neil, Thomas, M.D..	1888	(Deceased.)
O'Reilly, Anthony, M.D..	1861	(Deceased.)
6O'Reilly, James R., Judge, B.A.	1852	Prescott.
O'Reilly, T. J., M.D..	1902	Placentia, Nfld.
O'Rourke, Thos. A., B.A., LL.B.	1895	Trenton.

Name.	Date of Graduation	Address.
Orser, T. H., B.A., 1899; M.D..	1902	Glenvale.
O'Shea, James F., M.D..	1881	(Deceased.)
O'Shea, James, B.A..	1891	Kingston.
Ostrom, Ethel L., B.A..	1905	Alexandria.
O'Sullivan, John, M.D..	1868	(Deceased.)
*Oxley, Malcolm S., B.A..	1878	Montreal.
Page, Thomas A., M.D..	1883	Brockville.
Pannell, W. L., M.D..	1903	Kingston.
2Parker, Frank R., B.A..	1887	
Parker, James, B.A..	1898	Stirling.
Parker, Mabel (Ross), B.A.. ..	1895	Kingston.
Parker, Robert, M.D..	1861	Stirling.
Parker, R. D. W., M.D..	1900	Bermuda.
Parkyn, H. A., M.D..	1892	Chicago, Ill.
Parlow, Allen B., M.D...	1894	Iroquois.
Parmelee, George W., B.A.. ...	1889	Quebec.
Parsons, J. E., B.A..	1905	Toronto.
*Patterson, Andrew, B.A..	1884	Montreal.
2Patterson, Andrew O., M.A....	1897	Carleton Place.
*Patterson, Gilbert C., B.A., '78; M.A..	1880	Embro.
Patterson, James A., M.D.. .. .	1889	Iron River, Wis.
Patterson, James R., M.D..	1867	Port Elgin.
Patterson, John M., M.D..	1890	Okeowa, Neb.
Patterson, Richard L., M.D.. ..	1885	Buffalo, N. Y.
Patterson, W. J., M.D..	1902	Peterboro.
3, 13Patterson, Wm. J., B.A., '88; M.A..	1895	Perth.
Patterson, W. R., B.A..	1902	Kingston.
Paul, H. E., B.A., 1898; M.D...	1901	Newburgh.
Paul, J. H., M.D..	1898	Jamesville, N. Y.
4, 7Peacock, Edward R., M.A...	1894	Dom. Securities Co., Toronto.
Pearce, W. R., M.A..	1905	Wallacetown.
*5, 25, 4, 7Peck, W. W., M.A., '94; LL.B..	1894	Foxboro.
Pennock, N. I., M.D..	1904	Ogdensburg, N.Y.
Pense, E. H., B.Sc..	1903	Georgian Bay Canal Survey, Lake Talon.
Pentland, G. E., B.A..	1904	Heathcote.
Perault, Julian, M.D..	1857	
Perney, F. E., B.A..	1903	Ottawa.
*Perrin, Louis, B.A..	1884	Wroxeter.
Petapiece, A. W., B.A..	1903	Merrickville.
Peterson, Wm. C. M. G. (Principal and Professor of Classics, McGill University), LL.D...	1903	Montreal.
5Pettit, L. J., B.A..	1904	St. Thomas.
*Petrie, J. A., B.A..	1901	Belleville.

Name.	Date of Graduation.	Address.
*Phalen, Ronald M., B.A.	1889	Cartwright.
Phelan, Daniel, M.D.	1877	Kingston.
Phelan, Leopold, B.A., M.D.	1890	Ackley, Iowa.
Philp, J. H., M.A.	1903	Morrisburg.
Pierce, Ada E., B.A.	1904	Willetsholme.
Pilkie, P. J., B.A.	1895	Fort William H. S.
Pike, N. J., M.D.	1898	Saginaw, Mich.
Pirie, Alexander F., M.D.	1887	Cartago, Costa Rica.
Pirie, Edwin, B.A.	1888	
Pirie, H. H., B.A.	1890	Cartago, Costa Rica.
Pitblado, Colin, M.D.	1886	(Deceased.)
*Pitts, F. E., B.A.	1897	New Liskeard.
1Playfair, Alfred W., M.A.	1896	Windsor Mills, Que.
Platt, E. O., B.A.	1904	Plainfield.
Pocock, C. E., B.A.	1902	Little Current.
*Pollock, Peter M., B.A.	1881	Scotland.
*Pollok, Allen, D.D., (Principal, Presbyterian College)	1876	Halifax.
Polson, Susan C., (Rollins), B.A.	1896	London.
4Polson, S. M., M.A.	1905	Kingston.
Poole, A. W., B.A.	1899	350 La Salle Ave., Chicago, Ill.
Pope, Egerton L., B.A.	1895	Cookshire, Que.
Pope, F. J., M.A.	1891	Kingston.
Pope, Step. D., B.A., '61; LL.D.	1890	Victoria, B.C.
Porteous, C. A., M.D.	1901	Verdun.
Porter, S. E., M.D.	1900	South Mountain.
Porter, W. C., B.A.	1903	Cleveland, Ohio.
*Potter, James G., B.A.	1891	Peterboro.
Potter, Levi, M.D.	1870	Enniskillen.
Potter, Samuel, M.D.	1875	(Deceased.)
Potter, Thomas, M.D.	1876	Ottawa.
Powell, George K., B.A.	1891	Toronto.
Powell, W. B., B.A.	1901	Brockville.
Power, Gertrude F. E., B.A.	1903	Kingston.
Power, J. F., M.A.	1899	Simcoe.
Power, John J., B.A.	1900	Halifax, N.S.
Pratt, William F., M.D.	1888	
Pratt, Wilton, M.D.	1888	
Prendergast, A. R., B.A.	1901	Montreal.
Preston, Richard, M.D.	1875	Carleton Place.
Preston, Robert H., M.D.	1864	Ottawa.
Price, Cornelius V., Judge, LL.B.	1863	Kingston.
Price, Edwin, B.A.	1888	Dundas.
Price, Henry H., B.A., '77; M.D.	1890	Cartago, Costa Rica.
Price, Robinson B., M.D.	1886	Bath.
Pringle, H. S., B.A.	1899	Oak Park, Ill.
*Pringle, John, B.A., 1875; D.D.	1904	Dawson, Yukon.

Name.	Date of Graduation.	Address.
Pringle, J. F., B.A.	1905	Cornwall.
Pringle, Robert H., B.A.	1882	Brampton.
Pritchard, J. A., M.D.	1903	Brockville.
*Prittie, W. T., B.A.	1897	Vernon.
Proderick, W. S., M.D.	1900	Ottawa.
Purdy, Alvanley N., M.D.	1873	
Purdy, Charles W., M.D., 1869; LL.D.	1898	(Deceased.)
Purdy, May C., B.A.	1904	Kingston.
Purdy, Victor M., B.A.	1894	New Westminster, B. C.
Purvis, W., B.A.	1899	Rosthern, Sask.
Putman, J. H., B.A.	1899	Ottawa.
2Quigley, J. P., M.A.	1903	Kingston.
Race, W. B., B.A.	1903	Sault Ste. Marie.
Rainsbury, W. C., M.D.	1900	Skegby, Notts, Eng.
Rainstead, H.	1887	
Ramsay, Robert, M.D.	1861	(Deceased.)
Ramsay, W., B.A.	1902	Plattsville.
Rand, Silas T., LL.D.		Hantsport, N. S.
Randall, C. R., M.D.	1905	Seeley's Bay.
Raney, Wesley H., B.A.	1895	Lachute, Que.
Rankin, William H., M.D.	1889	Brooklyn, N. Y.
*Rannie, Alex., B.A.	1898	Nairn.
Ranstead, William, M.D.	1887	Ottawa.
Rathbun, Herbert B., B.A.	1883	(Deceased.)
3*Rattray, James, B.A.	1887	Eganville.
Rawlins, J. W., B.A., 1899; B.Sc.	1901	Copper Cliff.
Raymond, C. Nelson, M.D.	1891	New Rochelle, N.Y.
Rayside, Edith, B.A.	1896	Ottawa.
Redden, Marion, B.A.	1903	Kingston.
*Reddon, John A., B.A.	1889	Fort Coulonge.
Redmond, A. V., B.Sc.	1903	Kingston.
Redmond, Robert C., B.A., 1895; M.D.	1898	Bishop's Mills.
Redmond, W. C., M.D.	1901	Bethel.
Reekie, J. S., M.D.	1902	Sidney, N. S. W.
Reeve, Richard A., M.D., (Dean, Toronto School of Medicine)	1865	Toronto.
Reeve, John L., M.D.	1882	Clinton.
Reeve, Henry H., M.D.	1880	(Deceased.)
Reid, Etta A., (Newlands) M.A.	1892	Kingston.
Reid, E. J., B.A.	1904	Centreville.
Reid, F. D., B.Sc.	1904	Kingston.
Reid, G. M., M.D.	1903	Kingston.
Reid, J. A., B.Sc.	1902	Annapolis, N. S.
Reid, John D., M.D., M.P.	1890	Cardinal.
Reid, Lulu, B.A.	1905	Kingston.

Name.	Date of Graduation.	Address.
Reid, R. M., M.D.	1902	Renfrew.
Reid, R. G., M.D.	1905	Kingston.
Reid, S. M., B.A.	1899	Kingston.
Reid, Victoria, B.A., 1900; M.D.	1904	Kingston.
*Reid, William, D.D.	1876	(Deceased.)
Reid, William D., M.D.	1880	Barre, Vt.
Reid, M. R., M.A.	1897	Napanee.
Reilly, Adrian, M.D.	1862	(Deceased.)
*Renaud, Allen C., B.A.	1864	Montreal.
Reynolds, Helen E.,(Ryan), M.D	1885	Sudbury.
Reynolds, M., B.A., 1903; M.D.	1905	Athens.
*Richardson, Rev. A. W., M.D.	1899	Kingston.
Richardson, E., M.D.	1901	Brockville.
Richardson, William W., B.A.	1893	Winnipeg.
Rielly, F. J., B.A.	1903	Sydenham.
*Rigby, O., (Headmaster, Trinity College School, Port Hope) LL.D.	1903	Port Hope.
Rigney, Timothy J., B.A.	1895	Kingston.
Ritchie, Geo., B.A., 1878; B.Sc.	1878	Toronto.
Robb, D., B.A.	1903	Brussels.
Robb, J. J., B.A., 1904; M.D.	1905	Battersea.
38Robertson, Alex. M., M.A.	1896	Leamington.
Robertson, Alexander C., M.D.	1893	Dawson, Y. T.
Robertson, Donald M., B.A.	1886	Toronto.
Robertson, D. M., B.A.	1899	Harwich.
Robertson, G. D., B.A.	1903	Stratford.
Robertson, J. B., B.A.	1903	Toronto.
Robertson, J. J., M.D.	1903	Montreal, Que.
Robertson, John W., M.D.	1888	Westville, N.S.
Robertson, J. W., LL.D.	1903	Ottawa.
Robertson, Miles S., B.A.	1884	Violet.
Robertson, Struan G., B.A.	1891	Hopewell, N. S.
Robinson, Andrew, M.D.	1889	Kalamazoo, Mich.
Robinson, Andrew, M.D.	1895	Fort Wayne, Ind.
Robinson, Edward B., M.D.	1891	
Robinson, F. A., B.A.	1904	Louisville, Ky.
Robinson, J., B.A.	1903	Hamilton.
Robinson, E. J., M.D.	1904	North Williamsburg.
Robinson, Robert P., M.D.	1888	Ottawa.
Robinson, Robert R., M.D.	1892	Klondyke, B.C.
Roche, William P., M.D.	1860	(Deceased.)
Rockwell, Albert, M.D.	1868	Lewiston, Idaho.
Rockwell, Ashbel S., M.D.	1872	Rochester, N.Y.
Roddick, T. G., LL.D., (Dean of the Faculty of Medicine, McGill University)	1903	Montreal, Que.

Name.	Date of Graduation.	Address.
Rogers, James C., B.A.	1894	1735 46th St., Brooklyn, N.Y.
1Rogers, C. S. G., M.A.	1901	Niagara Falls.
Rogers, R. Vashon, B.A., 1861; LL.D.	1895	Kingston.
Rogers, David H., M.D.	1881	Gananoque.
28Rogers, W. C., M.A.	1899	Linden Valley.
*Rollins, James, B.A.	1895	London.
Rollo, James, B.A.	1852	(Deceased.)
*Romanes, George, LL.D.	1866	(Deceased.)
Roose, E. C. Robson, LL.D.	1889	London, Eng.
Rose, George R., B.A., '56; M.A.	1860	(Deceased.)
*Rose, G. W., B.A.	1898	Mono Centre.
Rose, S. L. E., B.Sc.	1903	Tamworth.
Ross, Alex. H. D., B.A., '88; M.A.	1889	Tilsonburg H. S.
Ross, Arthur E., B.A., '92; M.D.	1897	Kingston.
*Ross, Donald, B.A., 1860; M.A., 1862; B.D., (Prof., Queen's University)	1863	Kingston.
Ross, George S., B.A.	1856	
Ross, G. W., Hon., (Premier of Ontario) LL.D.	1903	Toronto.
*Ross, James, D.D.	1864	(Deceased.)
*Ross, James, B.A., 1878; M.A., 1881; B.D., 1881; D.D., (Professor, Presbyterian College)	1898	London.
Ross, John Reid, B.A.	1862	
Ross, Thomas K., M.D.	1863	(Deceased.)
*Ross, Walter, B.A., 1859; M.A.	1862	(Deceased.)
Ross, William A., Judge, B.A.	1855	(Deceased.)
Ross, W. J., M.D.	1900	(Deceased.)
Rothwell, William, B.A.	1881	
Rourke, Francis, M.D.	1872	
Row, R. K., B.A.	1897	Berwin, Ill.
Rowse, Mark R., B.A.	1870	Bath.
Roy, E., M.D.	1901	Kingston.
Roy, Henry, M.D.	1885	Chisholm.
Russell, Donald G., M.D.	1885	Spokane, Wash.
Russell, F. Howard, B.A.	1889	Victoria, B. C.
Russell, Jean McG., (Young) B.A	1894	(Deceased.)
Russell, Margaret, B.A.	1897	Ottawa.
Russell, W. J., B.A.	1900	Pakenham.
Russell, Samuel, B.A.	1882	Deseronto.
Rutledge, S. H., M.D.	1904	Thomasburgh.
Ruttan, Emily, B.A.	1902	Kingston.
Ruttan, Franklin S., M.D.	1893	Yarker.
Ruttan, Joseph B., M.D.	1863	Wellington.

Name.	Date of Graduation.	Address.
Rutherford, David B., M.D.	1882	(Deceased.)
Rutherford, James, M.D.	1870	Orono.
Ryan, Clara, M.D.	1893	Sherman, Texas.
Ryan, Edward, B.A., 1886; M.D., Prof., Queen's University)	1889	Kingston.
Ryan, Michael D., M.D.	1891	Saginaw, Mich.
Ryckman, Frera L., B.A.	1898	
Ryerson, S. Edward, M.A.	1895	(Deceased.)
St. Remy, C. de, M.D.	1902	(Deceased.)
Sadler, G. S., M.D.	1899	Combermere.
Sands, Ernest, M.D.	1889	(Deceased.)
Sands, Wm. W., M.D.	1894	Kingston.
Sargent, F. R., B.A.	1905	Kingston.
Saunders, Elsie E., M.A.	1905	Kingston.
Saunders, Herbert J., M.D.	1869	(Deceased.)
Saunders, Lawrence, M.D.	1868	(Deceased.)
Saunders, Wm., F.R.S.C., LL.D.	1896	Ottawa.
14Saunders, W. J., M.A.	1900	Morrisburg.
Saunders, W R., B.A.	1899	Dundas H. S.
Sayers, Alexander, M.D.	1870	(Deceased.)
Scales, Thomas, B.A., '78; M.D.	1887	(Deceased.)
Schultz, Hon. John C., M.D., LL.D.	1894	(Deceased.)
Scott, A., B.A.	1899	Glenmorris.
*Scott, Alex. H., B.A., '75; M.A.	1878	Perth.
8Scott, Colin A., B.A.	1885	Chicago.
Scott, H. H., B.Sc.	1905	Perth.
Scott, J. M., B.A.	1897	Brockville.
Scott, Jean M. C., B.A.	1905	Kingston.
*Scott, Marcus, B.A.	1893	Detroit.
Scott, O. N., B.Sc.	1903	Le Roi Mining Co., Rossland, B.C.
Scott, Patrick J., M.D.	1888	Southampton.
Scott, R. A., B.A.	1905	Walkerton.
*Scott, Thomas B., B.A., 1875; M. D., (Medical Missionary)	1892	Jaffna, Ceylon.
*Scott, Thomas R., B.A.	1888	Oxbow, N.W.T.
Scott, T. S., B.A., 1894; B.Sc.	1897	Niagara Falls.
Scott, Wm. J., M.D.	1891	Lanark.
Scott, William S., M.D.	1855	(Deceased.)
Scott, W. B., M.D.	1897	Crystal, N. Dak.
Scovill, Simmons S. S., M.D.	1877	Rat Portage.
Scribner, J. F., M.D.	1898	Ottawa.
Seager, James, M.D.	1894	Ottawa.
Sears, J., B.Sc.	1905	Kingston.
Searls, Abraham W., M.D.	1864	(Deceased.)
Seath, John, B.A., LL.D.	1902	Toronto.

Name.	Date of Graduation.	Address.
Seaton, E. T., B.A.	1897	Caledonia.
*Sedgwick, Robert, D.D.	1878	(Deceased.)
Sexsmith, M. E., B.A., 1903; LL.B.	1904	Centreton.
Sexton, J. H., M.A.	1902	Ingersoll.
Shannon, Jno. R., B.A., '85; M.D.	1890	20 West 35th St., New York.
Shannon, Lewis W., B.A.	1877	Kingston.
Shannon, Robert W., B.A., 1875; M.A.	1880	Dawson City, Y.T.
Sharp, Helena A., B.A.	1905	Odessa.
*Sharp, John, M.A.	1892	New Liskeard.
Shaw, A., M.D.	1899	Philadelphia, Pa.
Shaw, John M., B.A., 1883; M.D.	1886	Lansdowne.
Shaw, Lily, B.A.	1903	Kingston.
Shaw, Robert, B.A.	1873	(Deceased.)
Sheffield, E. B.A., 1900; M.D.	1903	Hospital for Insane, Staten Island.
Shenick, Adeline, B.Sc., B.A.	1891	(Deceased.)
*Sheraton, James P., D.D., (President, Wycliffe College)	1882	Toronto.
2, 19Shibley, G. R., M.A.	1901	Kingston.
6Shibley, Henry T., B.A.	1881	(Deceased.)
Shibley, Jennie M., (Cram) B.A.	1900	Cobden.
Shibley, Laura, B.A.	1890	All Hallows' School, Yale, B.C.
Shier, James, B.A.	1862	
Shirley, Joseph W., M.D.	1863	(Deceased.)
Shirreff, W. T., M.D.	1903	Fitzroy Harbour.
8, 11Shorey, Edm. C., B.A., '86; M.A., 1887; D.Sc.	1896	Honolulu, H.I.
5Shortell, D. H., M.A.	1898	Washburn.
4, 13, 22Shortt, Adam, (Professor, Queen's Univ.) B.A., 1883; M.A.	1884	Kingston.
*7, 17Shortt, J. S., B.A., '94; M.A.	1897	De Winton, Alta.
Shurie, Josiah S., B.A.	1889	
*Sieveright, James, B.A.	1855	Manitowaning.
Sieveright, James A., M.D.	1870	(Deceased.)
8Sills, Wm. R., M.A.	1895	Kingston.
Silver, L. P., B.Sc.	1902	
Simpson, B. L., B.A., 1903; M.A.	1904	Peterborough.
Simpson, James, B.A.	1864	
Simpson, W. J., M.D.	1899	Kingston.
Sinclair, Anna E., B.A.	1901	Norm'l School, Ottawa.
Sinclair, H. H., B.A.	1899	
4*Sinclair, John A., M.A.	1890	(Deceased.)
*Sinclair, Robert C. H., B.A.	1888	Fenelon Falls.

Name.	Date of Graduation.	Address.
Singleton, A. H., B.A., 1901; M.D.	1904	Newboro.
Singleton, Jessie W., B.A.	1905	Kingston.
1, 2, 19Skelton, O., M.A.	1899	Cornwall.
Skimin, Nellie St. G., M.D.	1892	Hamilton.
Skinner, Henry, M.D.	1862	(Deceased.)
Skinner, John S., B.A.	1883	Montreal.
9Slack, E. B., B.A.	1902	Toronto.
Sloan, D., B.Sc.	1905	Perth.
Smart, V. I., B.A.	1898	
Smeeton, W. F., B.Sc.	1900	Oakville.
Smellie, Donald McK., M.D.	1888	(Deceased.)
*Smellie, George, D.D.	1885	(Deceased.)
Smellie, James F., B.A.	1890	Ottawa.
Smirle, Harriette H., (Wilson) M.A.	1903	Winnipeg.
Smith, A. L., M.D.	1902	Kingston.
Smith, Alexander L., B.A.	1883	Alexandria.
Smith, Annie, B.A.	1894	Walkerville.
Smith, A. G., M.D.	1898	Deseronto.
Smith, B. A., M.D.	1905	Hartington, Ont.
Smith, D. T., M.D.	1901	Ottawa.
Smith, Elizabeth, (Shortt) M.D.	1884	Kingston.
Smith, Frederick B., M.D.	1886	Watertown, N.Y.
Smith, George, M.D.	1858	(Deceased.)
Smith, George H. W., M.D.	1892	Sydney, N.S.W.
Smith, Gordon J., B.A.	1886	Paris.
Smith, J. E., B.A.	1901	Seymour.
*Smith, James F., M.D.	1888	Bradford.
*Smith, James C., D.D., B.A., 1861; M.A., 1863; B.D.	1880	(Deceased.)
Smith, J. C., B.A.	1898	Kingston.
Smith, James H., B.A.	1903	Kuhryville.
Smith, James H., M.A.	1893	Ridgetown.
Smith, John R., M.D.	1863	(Deceased.)
Smith, N., M.D.	1904	Kingston.
Smith, Ralph G., M.D.	1893	Oakland, Iowa.
Smith, S. M., M.D.	1900	S. Milwaukee, Wis.
Smith, Violet B., B.A.	1897	Munro College, Forsythe, Georgia.
Smith, W. A., M.D.	1905	Kingston.
Smyth, Robert A., M.D.	1883	(Deceased.)
*Smyth, William J., B.A.	1881	(Deceased.)
Smythe, George H., B.A.	1897	Kingston.
*Snell, G. W., B.A.	1899	West Brome, Que.
3Snell, Joseph, M.A.	1890	Wiarton.
Snider, Elias T., M.D.	1889	Inwood.
Snider, Samuel H., M.D.	1881	Carman, Man.

Name.	Date of Graduation.	Address.
Snook, Marcus S., B.A.	1881	(Deceased.)
Snowden, H. A., B.A.	1902	
*Snowdon, John M., B.A.	1885	Ottawa.
Snyder, H. Adell, M.A.	1895	
Snyder, T., M.D.	1899	Niagara Falls, N.Y.
*Solandt, D. M., B.A., 1900; B.D.	1905	Kingston.
Somerville, Jas. A., B.A., 1858; M.D.	1866	(Deceased.)
*Somerville, James H., B.A.	1881	Norwood.
Spafford, H. W., M.D.	1855	(Deceased.)
24Spankie, Wm., B.A., '62; M.D.	1885	Wolfe Island.
Spankie, James E., M.D.	1891	Greenwood, Y.T.
Sparham, George S., M.D.	1859	(Deceased.)
Sparks, J. F., B.A., 1901; M.D.	1905	Kingston.
Sparks, W. F., B.A.	1903	Brampton.
Spear, Hugh, M.D.	1873	Toronto.
9Speers, J. A., B.A.	1905	Alliston.
*Spence, Alexander, D.D.	1864	(Deceased.)
Spence, H. D. L., B.A.	1904	Kingston.
Spence, J. C., B.A.	1903	Ottawa.
Spencer, Henry, M.D.	1862	(Deceased.)
Spooner, Armon C., B.A., 1896; M.D.	1905	Latimer.
Spooner, George D., M.D.	1860	(Deceased.)
Spooner, Hiram R., M.D.	1869	(Deceased.)
Spooner, Margaret M., (Abbott) B.A.	1886	280 James Place, Brooklyn, N.Y.
Spotswood, W. A. J., M.D.	1903	Alexandria.
Sproat, Alexander, B.A.	1853	(Deceased.)
*Sproul, Nathaniel J., B.A.	1891	
Sproule, E. W., M.D.	1905	Harrowsmith,
Squire, George H., B.A.	1893	Kingston.
Squire, R. L., B.Sc.	1904	Kingston.
Squire, Wm. W., B.A., '54; M.A.	1864	(Deceased.)
Staley, A. A., M.D.	1903	Wolfe Island.
Stanley, Rt. Hon. Earl Derby, LL.D.	1889	England.
Stanley, J. N., M.A.	1901	Port Colborne.
29Staples, Louis, M.A.	1895	Kingston.
*Steele, Jacob, B.A., 1883; B.D.	1889	Callander.
Stevens, F. G., B.Sc., 1900; M.E.	1901	Guanajuata Cons. Mining & Milling Co., Guanajuata, Mexico.
Stevens, Nathaniel T., M.D.	1892	Clifton, Ill.
Stevenson, Alexander J., B.A.	1882	Minden.
Stevenson, John A., M.D.	1894	Chicago.
*Stevenson, John F., D.D.	1880	(Deceased.)

Name.	Date of Graduation.	Address.
Stevenson, R. M., B.A.	1905	Ridgetown.
Stewart, Alexander, M.D.	1889	Chicago, Ill.
Stewart, Alexander J., M.D.	1869	
Stewart, Daniel W., B.A.	1884	Renfrew.
Stewart, Ernest J., B.A.	1896	
Stewart, Flora Belle, B.A.	1898	
Stewart, George G., M.D.	1895	Elmside. Que.
6Stewart, James, M.D.	1894	(Deceased.)
8Stewart, James A., M.D.	1892	
Stewart, John M., M.D.	1882	Chesley.
Stewart, J. R., B.A.	1904	Waba.
Stewart, Margaret J., B.A.	1902	Renfrew.
Stewart, Martha G., B.A.	1902	Laguerre, Que.
3Stewart, William, B.A.	1879	Toronto.
Stewart, A. E., M.D.	1898	Chicago, Ill.
Stilwell. A. J., B.Sc.	1902	Bracebridge.
Stirling, James A., M.D.	1885	St. Thomas.
Stirling, John E., M.D.	1884	
Storms, Douglas G., M.D.	1886	Hamilton.
34Story, Selina G., M.A.	1901	Dutton H. S.
Stothers, R., B.A.	1899	Ottawa.
Stowell, Olmsby O., M.D.	1869	
Strathcona, Earl, LL.D.	1905	London, Eng.
Strachan, B. O., B.Sc.	1905	Kingston.
*Strachan, Daniel, B.A.	1889	Brockville.
Strange, John, B.A., 1877; LL.B.	1883	Kingston.
Stratton, C. M., M.D.	1902	Kingston.
Struthers, W. E., B.A.	1905	Lanark.
*Stuart, James G., B.A.	1876	London.
Stuart, Irwin, B.A.	1870	(Deceased.)
Stuart, Wm. A., B.A., 1888; M.D.	1891	Clarenceville, Que.
Stubbs, S. J., B.A.	1899	Smith's Falls H. S.
*Sturgeon, Robert J., B.A.	1887	Burk's Falls.
Sullivan, D. V., B.A., 1890; M.D.	1892	(Deceased.)
Sullivan, J. F., B.A.	1904	Ottawa.
Sullivan, Hon. Michael. (Prof., Queen's Univ.) M.D.	1858	Kingston.
Sullivan, Thomas, M.D.	1863	(Deceased.)
Sullivan, William, B.A.	1862	Kingston.
Supple, J. A., B.A.	1899	Pembroke.
Sutherland, E., B.Sc.	1902	Belleville.
Sutherland, J. C., B.A.	1901	Richmond, Que.
Sutherland, Robert, B.A.	1852	(Deceased.)
7Swanson, W. W., M.A.	1905	Oshawa.
Sweetland, John, M.D.	1858	Ottawa.
Switzer, Wilson I., M.D.	1862	(Deceased.)
Symmes, C. R., M.D.	1903	Aylmer, Que.
*Symonds, H., D.D.	1901	Montreal.

Name.	Date of Graduation.	Address.
Symington, Thomas J., M.D....	1881	Camlachie.
Tandy, H., B.A., 1900; M.D....	1904	Kingston.
Tandy, W. R., M.A..	1899	Peterboro.
Tarbell, Horace S., B.A..	1862	
Tassie, William, LL.D..	1871	(Deceased.)
Taylor, James, M.D..	1864	(Deceased.)
Taylor, John A., B.A..	1892	Dutton H. S.
Taylor, Mabel A., B.A..	1903	Hamilton.
Taylor, William F., M.D..	1881	Brisbane, Queensland.
Teepel, Etson W., M.D..	1896	(Deceased.)
Tennent, R. W., M.D..	1905	Belleville.
3, (*b*) Teskey, Kathleen, B. A., 1903; M.A..	1904	Hamilton.
Theal, George McC., LL.D... ..	1895	Cape Town, Africa.
Thibaudeau, P. H., B.A..	1903	Markdale.
Thibodo, Augustus J., B.A., '51; M.A..	1854	Niagara Falls, N. Y.
Thibodo, Francis H., M.D.. ...	1895	Prairie City, Oregon.
Thibodo, Oliver, M.D..	1857	Los Angelos, Cal.
Thibodo, Robert, B.A., '62; M.D.	1862	(Deceased.)
Thibodo, Wm. B., B.A., '62; M.A.	1865	Rat Portage.
Thirkell, William G., M.D.. ...	1861	Sodus, N. Y.
Thompson, A. M., M.A..	1902	Sarnia.
Thompson, A. Y., B.A..	1903	Strathroy.
Thompson, E. J., M.D..	1901	Kingston.
Thompson, Edna G., B.A..	1903	Kingston.
*Thompson, George, B.A..	1863	Scotland.
*Thompson, George M., B.A....	1878	Glasgow, Scotland.
Thompson, Hiram B., M.D.. ...	1888	Barrie.
Thompson, John, B.A..	1855	(Deceased.)
*Thompson, John R., B.A., 1865; M.A..	1868	(Deceased.)
Thompson, Lottie, B.A..	1903	Picton.
Thompson, Maggie J., B.A.. ...	1894	Almonte.
Thompson, P. M., M.A..	1899	Gravenhurst.
*Thompson, Thomas J., M.A....	1895	
Thompson, William D., M.D....	1892	Brooklyn, N. Y.
Thompson, William McC., B.A..	1888	Dunbar, N. S.
Thomson, J. P., F.R.S.G.S., LL.D..	1903	Brisbane, Australia.
Thorburn, John, LL.D..	1880	Ottawa.
Thorne, Stephen H., M.D..	1887	Bobcaygeon.
Thorne, James, B.A..	1897	Ottawa.
Thornton, Thomas H., M.D.. ..	1870	Consecon.
Thornton, William H., M.D....	1864	(Deceased.)
Tilman, Herbert A., M.D..	1895	Kingston, Jamaica.
Tilman, Harry G., M.D..	1889	Kingston, Jamaica.
Tinkess, A. L., M.D..	1898	Plessis, N. Y.

Name.	Date of Graduation.	Address.
Todd, Alpheus, C.M.G., LL.D...	1881	(Deceased.)
Todd, Samuel G., M.D..	1890	Meshawaka, Ind.
Tompkins, Louise H., B.A.. ...	1904	Brockville.
Townsend, Harland W., B.A....	1887	(Deceased.)
Tracey, Robert, M.D..	1862	Belleville.
Tracey, Thomas B., M.D..	1865	(Deceased.)
*Trotter, Thomas, (President of Acadia University) D.D....	1903	Wolfville, N. S.
Trousdale, James D., M.D.. ...	1860	(Deceased.)
Truscott, S. A., M.A..	1904	Sydenham.
Tudhope, M. B., B.A..	1897	Orillia.
Turnbull, Agnes M., (Medical Missionary) M.D..	1892	Indore, India.
*4Turnbull, James H., M.A.. ..	1896	Ottawa.
Turnbull, John, M.D..	1905	Lowville.
Turner, John B., B.A..	1889	Hamilton.
Turner, Adelaide, M.D..	1897	New York.
Tuttle, Henry E., M.D..	1892	Chases' Mills, N. Y.
Tuttle, Leslie, M.D..	1875	Tweed.
Tyner, W. G., B.A., 1898; M.D.	1901	Kingston.
Uglow, W. L., B.A..	1905	Kingston.
*Ure, Robert, D.D..	1876	Goderich.
Valleau, Archibald J., M.D.. ...	1891	Wolcott, Vt.
Valleau, George Z., M.D..	1867	
Van Allen, John R., M.D..	1871	Denver, Col.
Van Ness, C. S., M.D..	1904	Wolfe Island.
Van Vlack, Gilbert J., M.D.. ...	1869	(Deceased.)
Vaux, M. Lillian, (MacKinnon) M.A..	1903	Halifax, N.S.
Vercoe, F. H., B.A..	1900	
11a, 14Voaden, J., M.A..	1903	Niagara Falls.
Volume, D. A., B.A..	1898	Rose Bank, Man.
Waddell, W. H., M.D..	1880	North Augusta.
Wade, Robert J., M.D..	1888	Brighton.
Wade, Wm. R., M.D..	1888	(Deceased.)
Wafer, Francis M., M.D..	1867	(Deceased.)
Wagar, C. M., M.D..	1905	Enterprise.
Wager, Ephraim N., M.D..	1897	Hayburn.
Waldren, H. M., M.D..	1898	Dayton, N. Dak.
Walkem, Wm. W., M.D..	1873	Creston, Y.T.
Walkem, R. K., B.A..	1902	Vancouver, B.C.
Walker, Allen H., M.D..	1867	Toronto.
Walker, Andrew, B.A..	1901	
Walker, Archibald D., M.D.. ..	1888	Riverside, Cal.
Walker, C. Wesley, B.A..	1902	(Deceased.)
Walker, H., M.D..	1897	Riverside, Cal.
Walker, Hattie A., M.D..	1890	(Deceased.)
Walker, H., B.A., 1902; B.Sc...	1904	Morewood.
*Walker, James, B.A..	1894	

Name.	Date of Graduation.	Address.
Walker, Stanley, M.D.	1889	Chebanse, Ill.
14, 9Walker, Thomas L., (Prof., Univ. of Toronto) M.A.	1890	Toronto.
*Walkinshaw, Wm., B.A., 1898; M.D.	1893	Stillwell, Ind.
Walks, R. H., B.A.	1900	Brooklin, Ont.
*Wallace, Alexander, B.A.	1847	(Deceased.)
Wallace, David, M.D.	1881	Metcalfe, Ont.
*2, 6, 17Wallace, James, M.A., '98; B.D.	1901	Lindsay.
Wallace, O. S. C., (Chancellor of McMaster Univ.) LL.D.	1903	Toronto.
Wallbridge, Asa F., B.A.	1854	Newcastle.
Ward, G. C. Tremaine, M.D.	1879	Napanee.
Ward, G. H., M.D.	1903	Napanee.
Ward, W., B.A.	1903	Kingston.
Wardlaw, James S., M.D.	1888	Galt.
*Wardrope, Thomas, D.D.	1878	Guelph.
Warner, Albert F., M.D.	1887	Napanee.
Warren, F. R. H., B.A., 1900; M.D.	1905	Balderson.
Warren, J. W., M.D.	1905	Harper.
Warren, L. A. H., M.A.	1902	Balderson.
Wartman, Philander G., M.D.	1864	(Deceased.)
Waters, John F., B.A.	1884	Ottawa.
Watson, Alice R., B.A.	1902	Kingston.
Watson, Andrew, B.A.	1861	
Watson, Charles V., M.D.	1863	
*Watson, David, B.A., 1850; M. A., 1852; D.D.	1886	Beaverton.
Watson, Donald, B.A.	1851	(Deceased.)
Watson, E. C., M.A., 1895; M.D.	1899	Detroit.
Watson, G. A., B.A.	1904	Toronto.
*Watson, James S., B.A.	1895	Minnedosa.
*Watson, Peter, B.A.	1852	(Deceased.)
Watt, W. J., B.A.	1905	Walkerton.
Watts, Ezra J., M.D.	1886	
*Watts, J. R., B.A., 1901; B.D.	1904	Shelburne.
Watts, Thomas E., M.D.	1890	Natural Bridge, N.Y.
Way, Hon. Samuel J., (Lieut.-Gov. and Chief Justice, South Australia) LL.D.	1895	Adelaide, South Aus.
Way, W. C., B.Sc.	1905	Lindsay.
Weatherhead, G. F., B.A., 1898; M.D.	1903	Brockville.
Webster, A. R., B.Sc.	1904	Can. Gen. Elec. Co., Peterboro.
Webster, B. E., B.A., 1895; M.D.	1896	Kingston.
Webster, Charles R., B.A.	1891	Kingston.

Name.	Date of Graduation.	Address.
Webster, James, B.A.	1857	(Deceased.)
Webster, George R., B.A.	1875	(Deceased.)
Webster, W. J., M.D.	1884	
Weekes, W. J., M.D.	1865	Ottawa.
Weese, Willametta	1903	Pembrooke.
Weir, Janet, M.D.	1891	Merrickville.
Weir, William, M.D.	1861	(Deceased.)
11, (*b*) Wells, E. J., B.A.	1903	(Deceased.)
Wells, James Walter, B.Sc.	1898	Belleville.
Wellwood, J. A., B.A., 1901; M.D	1903	Fordyce.
Westlake, Henry W., B.A.	1882	
Wheeler, James W., M.D.	1892	Cornwall.
White, Albert N., M.D.	1885	Denver, Col.
White, James W., M.D.	1891	Chicago, Ill.
White, Joseph F., B.A.	1877	Shanty Bay, Ont.
White, Lizzie R. (Leslie), B.A.	1895	Kingston.
Whiting, C. C., M.A., 1902; B.D.	1905	Toledo.
Whitney, Arthur W., M.D.	1888	St. Paul, Minn.
Whitney, J. P., M.P.P., LL.D.,	1903	Prescott.
*Whiteman, Richard, B.A.	1886	Duncans, B.C.
Whitteker, Walter C., M.D.	1895	Avonmore.
Whyte, William M., B.A.	1896	Pakenham.
Wight, L. S., B.A.	1901	Deseronto.
Wilgar, W. P., B.Sc.	1903	Engineer, Transcontinental Ry. Survey.
*Wilkie, William D., B.A.	1891	
Wilkinson, A. T., B.A.	1904	Pincher Creek, Alta.
Williams, E. J. F., B.A., 1903; M.D.	1904	Brockville.
Williams, Herbert S., M.D.	1884	Vernon, Y.T.
Williams, Hugh G., M.D.	1894	
Williams, H. Sophia, B.A.	1899	(Deceased.)
Williams, Mary I., B.A.	1904	St. Thomas.
Williams, W. H., M.A.	1903	Picton.
Williamson, A. R. B., B.A., 1895; M.A., 1896; M.D.	1899	Kingston.
Williamson, E. J., B.A., '98; M.A.	1900	Winnipeg.
Williamson, Florence, B.A.	1905	Kingston.
Williamson, G. H., B.A.	1899	Kingston.
Williamson, H. J., B.A., 1901; M.D.	1905	Kingston.
*Wills, Michael, LL.D.	1861	(Deceased.)
Wilmer, G. H., B.A.	1898	Rockspring.
Wilson, Annie J., B.A.	1904	Carp.
Wilson, Arthur C., M.D.	1891	Perth.
Wilson, Caroline L. M., B.A.	1890	Fleming, Assa.
Wilson, Charles J. C., M.D.	1869	Montreal.

Name.	Date of Graduation.	Address.
1Wilson, Harry L., (Prof., John Hopkins University) B.A., 1887; M.A., 1888; LL.D.	1903	Baltimore, Md.
Wilson, Jessie A., B.A.	1902	Gananoque.
Wilson, John A., M.D.	1863	(Deceased.)
Wilson, J. H., B.A.	1900	Smith's Falls.
Wilson, J. L., B.A.	1901	
*Wilson, Matthew H., B.A.	1894	Snake River.
6Wilson, R. A., B.A., 1901; M.A.	1902	Renfrew.
Wilson, Thomas, B.A., '77; M.D.	1880	Tara.
Wilson, T. A., M.D.	1900	Port Essington, Y.T.
*Wilson, T. R., B.A.	1897	Marathon.
Wilson, W. A., B.A.	1897	Rat Portage H. S.
2Windel, Henry C., M.A., 1896; M.D.	1902	Pontypool.
Witheril, E. R., B.A.	1899	Williamstown.
Wood, H. S., B.A.	1905	Peterborough.
9Wood, Isaac, (Prof., Queen's Univ.) B.A., 1884; M.A., 1891; M.D.	1892	Kingston.
Woodruff, G. A., M.D.	1902	
Woods, I. H., B.A.	1903	London Junction.
Woods, S. A., B.A.	1898	Metcalfe.
Workman, C. W., B.Sc.	1903	Centre Star Mine, Rossland, B.C.
Workman, J. K., B.Sc.	1904	Kingston.
Workman, W., M.D.	1903	Kingston.
Wormwith, N. B., M.A.	1905	Kingston.
Wright, A., B.Sc.	1905	Brockville.
Wright, E. A., B.A.	1902	Renfrew.
Wright, Edward W., M.D.	1886	
Wright, H. Mabel, B.A.	1901	Renfrew.
*Wright, John J., B.A.	1885	Peterboro.
Wright, Josephine, B.A.	1892	
Wright, R. Ramsay, (Vice-President of Univ. of Toronto and Dean of the Faculty of Arts), LL.D.	1903	Toronto.
Wright, Thomas A., M.D.	1888	Russell Man.
Wylie, James, B.A.	1864	(Deceased.)
Yates, Horatio, M.D.	1863	(Deceased.)
Yates, Octavius, M.D.	1856	(Deceased.)
Yates, Daintry B., B.A.	1898	
*Yeomans, Geo. A., B.A.	1863	Deseronto.
Yeomans, Horace P., B.A., '60; M.D.	1863	(Deceased.)
Young, Alexander, B.A.	1895	Blakeney.

Name.	Date of Graduation.	Address.
*Young, Colin G., B.A.	1893	Prince Albert, N.W.T.
Young, Daniel, M.D.	1862	Adolphustown.
Young, David, M.D.	1871	Lower Fort Garry, Man.
Young, Frederick M., B.A.	1886	Nanaimo.
Young, George P., LL.D.	1882	(Deceased.)
Young, Henry E., B.A.	1883	Chicago.
*Young, John, B.A., 1882; M.A.	1884	Hamilton.
Young, J. M., B.A., 1902; M.D.	1904	Renfrew.
Young, M. R., B.A., 1897; M.D.	1901	Millsville, N. S.
*Young, Robert, B.A.	1890	Pakenham.
Young, Ward, B.A., 1896; M.D.	1898	S. Framingham, Mass.
Young, Sir Wm., Chief Justice, LL.D.	1881	(Deceased.)
Young, William A., M.D.	1894	Westfield, Vt.
Young, William J., M.D.	1883	(Deceased.)
Youngson, Mary, B.A.	1898	Kingston.
Yourex, John McGill, M.D.	1876	Lonsdale.
Zwicker, F. G., M.D.	1903	Halifax, N.S.

ALUMNI.

The Registrar will be much obliged for notice of additions or corrections to this list.

Name.	Date of First Registration.	Address.
Abrey, James	1893	Toronto.
Alexander, W. A.	1893	Bishop's Mills.
Allen, Andrew	1884	Balderson's Corners.
*Allen, William F.	1882	Denver, Col.
Allen, Mary (Menzies)	1890	Beachburg.
*Andrew, Joseph	1879	Margaret, Man.
Argue, Andrew W.	1888	Stittsville.
Back, W. G.	1891	Vaughan.
*Bailie, Robert	1889	(Deceased.)
Bain, W. J.	1893	Elora.
Bain, Wm. R.	1858	Montreal.
Baker, W. R.	1894	Newburgh.
*Ball, William Macpherson S.	1842	(Deceased.)
Barker, John	1897	Somerbury, Assa.
*Barr, John	1857	(Deceased.)
Barr, Isabel (McPherson)	1890	Indianapolis.
Bamford, Frederick J.	1876	Winnipeg.
Bawden, J. R.	1855	Kingston.
Bell, J. W.	1893	Kingston.
Bell P. M.	1894	Westbrook.
*Bennett, James, B.A.	1881	(Deceased.)
Bennett, Margaret	1896	Omemee.
Bently, Carrie L., (Scott)	1889	Toronto.
Bertram, Thomas	1880	Dundas.
*Best, D. W.	1889	Beaverton.
Bethune, Alexander	1886	London.
Bethune, James, K.C.	1856	(Deceased.)
Bethune, William S.	1879	Wingham.
Birch, Ada L.	1895	Kingston.
*Black, William, B.A.	1889	Arkansas.
Blane, William	1898	Renfrew.
Booth, Jackson C.	1882	Ottawa.
Booth, John F.	1883	Ottawa.
*Borthwick, H. J.	1855	Morden, Man.
Boyle, Thomas	1884	Gananoque.
Bradbury, Emily	1892	Gananoque.
Bradley, J.	1896	Peterboro.
Bristol, Emily F.	1886	Napanee.
Brown, P. W.	1896	Kingston.
Brownell, James E.	1877	Avonmore.
Bruce, David A. J.	1886	
Bruce, Edward W.	1886	Toronto.

Name.	Date of First Registration.	Address.
Burger, Charles M.	1886	Hudson, Que.
Burrows, Annie M.	1889	Kingston.
Burt, Ellen A. A.	1890	Caldwell.
Bute, J. H.	1894	Houston, Texas.
Byers, D. R.	1895	Gananoque.
*Byers, Henry	1848	(Deceased.)
Callaghan, Etta	1888	Kingston.
Calvin, H. A.	1868	Garden Island.
*Camelon, David	1853	(Deceased.)
Camelon, John M.	1885	Chicago.
Cameron, Colin, K. O.	1889	Iroquois.
Cameron, Donald	1888	(Deceased.)
Cameron, A. H., B.A.	1869	Napinka, Man.
Cameron, John S.	1889	Wellington.
*Cameron, Hugh	1856	(Deceased.)
*Cameron, J. J., M.A.	1871	
*Campbell, Charles A.	1887	Lakefield.
Campbell, John R.	1879	Wingham.
Campbell, Margaret A.	1895	Smith's Falls.
Cannon, J. D.	1894	Kingston.
Carey, M.	1893	Gananoque.
Cargill, Henry	1856	(Deceased.)
*Carmichael, James, B.A.	1858	(Deceased.)
Carr-Harris, D.	1893	Kingston.
Carr-Harris, Mary A (Gunn)	1893	Cairo, Egypt.
Carr-Harris, R. R.	1896	Kingston.
Carson, Joseph T.	1891	(Deceased.)
Cartwright, C.	1894	Kingston.
Cartwright, Madeline L. (Matheson)	1889	
Caswell, W. G.	1896	Carleton Place.
Chambers, John N.	1875	Woodstock.
*Chambers, W. W.	1871	Erzeroum, Turkey.
Chisholm, G. W.	1895	Thamesford.
Chown, Susie	1894	Lucan.
Chown, Daisy	1898	Kingston.
Clapp, David P.	1873	Harrison.
Clarke, H. J.	1893	Belleville.
Clothier, James O.	1890	Kemptville.
Clow, C. N.	1895	Lyn.
Clune, Ella	1889	Warkworth.
Coleman, W. W.	1886	Seeley's Bay.
Cook, Florence (Horsey)	1893	Shanghai.
Cook, William	1858	Quebec.
Conklin, J. D.	1894	Winnipeg.
*Connery, D. G. S., M.A.	1890	Toronto.
Cooper, E. G.	1894	Lanark.
Corbett, Charles H.	1865	Kingston.

Name.	Date of First Registration.	Address.
Cotton, M. P.	1895	Ottawa.
*Crawford, Angus	1869	
Creeggan, Alfred H.	1889	Kingston.
*Currie, E. C.	1890	Sarnia.
Currie, P. W.	1895	Desbarats.
Curtis, Henry H.	1887	Montreal.
Dargavel, R. B.	1895	Newboro.
Day, Ila B.	1898	Harrowsmith.
Day, Lewis J.	1892	Cataraqui.
Devitt, H.	1895	Easton's Corners.
Dickson, Edwin H.	1867	Waco, Texas.
Dix, O. J.	1895	Kingston.
*Dodds, James A.	1886	Yacatecas, Mex.
*Doudiet, C. A.	1866	Montreal.
Douglas, John J.	1881	
*Dow, James.	1882	
Draffin, Isabel	1895	Ottawa.
Dresser, John A.	1889	Richmond, Que.
Drinnan, John K.	1887	Medicine Hat, Assa.
Drummond, Robert J.	1855	Perth.
Duff, John M.	1875	Guelph.
Duff, John	1850	(Deceased.)
*Dunning, Harry N.	1883	Watertown, N.Y.
Ellicott, T. W. H.	1896	Montreal.
Elliott, E. G.	1895	Kingston.
Elmore, Minor M.	1875	(Deceased.)
Emmons, John	1887	Shannonville.
*England, Luther M.	1890	
Farnden, Hunter R.	1842	
Farrell, Jennie (Dyde)	1883	Kingston.
Fenwick, Effie L.	1898	Ottawa.
Fenwick, Chrissie.	1898	Kingston.
Ferguson, A.	1895	Williamstown.
*Ferguson, John, B.A.	1858	Maple Valley, Man.
Flanigan, John	1858	Chicago.
Foik, H. J.	1897	Colborne.
Folger, Marion	1884	(Deceased.)
*Forest, David.	1879	Walton, Ont.
Fowler, Catherine G.	1893	Kingston.
*Fraser, John	1888	Indian Brook, St. Ann's, N.S.
Fraser, Marion	1894	L'Orignal.
Fraser, Nutting S.	1881	St. John's, Nfld.
Fraser, R. A.	1894	L'Orignal.
Fraser, Francis H.	1883	(Deceased.)
Gahan, Percy A.	1886	Windfall.
Galbraith, Malcolm C.	1853	Bowmanville.

Name.	Date of First Registration.	Address.
*Gallup, E. C.	1888	Mohawk.
*Gandier, Joseph	1866	Newburgh.
Garret, William R.	1884	
*Gerrior, John P.	1884	
Gibson, Arthur	1897	Kingston.
Gibson, Sara	1888	Belleville.
Gillies, John A.	1889	Braeside.
Girvin, H.	1896	Kingston.
Goodfellow, Joseph	1891	Parham.
*Goodwill, John	1858	(Deceased.)
Goodwin, Antoinette E.	1884	Studley, Halifax.
Goodwin, Ernest P.	1884	Cape Tormentine, N.B
Gordon, Robert A.	1882	
Gordon, W. B.	1893	Kingsford.
Gowan, T.	1894	Kingston.
Graham, R. S.	1894	Elginburg.
*Grant, H. R.	1889	Rossland, Alta.
Graves, F. M.	1894	Kingston.
*Gray, James M.	1861	Selkirk, Man.
Greaves, Jennie H.	1880	Kingston.
Grenfell, Marion M.	1898	Arnprior.
Griffith, M. A.	1893	Balder, Man.
Hallett, William J.	1890	Sorrie.
Hamilton, Clark.	1848	Kingston.
Hamilton, John, Judge.	1844	Milton.
Hamilton, Max G.	1882	Hudson Bay Co.
Hamilton, William.	1858	(Deceased.)
Harkness, Jefferson D.	1888	Kingston.
Head, John	1884	(Deceased.)
Heal, G. E.	1896	St. John's, Nfld.
Henderson, M.	1895	Sooke, B.C.
Hendry, Thomas	1868	California.
*Herald, Charles L.	1880	Chicago.
Hill, Annie G.	1890	Riviere du Loup.
Hobart, S. W.	1879	Toronto.
Hodgins, James C.	1889	Toronto.
Hooper, John G.	1879	Teeswater.
Hooper, Vere G.	1880	(Deceased.)
Honeywell, Ira E.	1890	Ottawa.
Houston, Martha (Campbell)	1889	Kingston.
Houston, Robert C.	1890	Toronto.
Hutton, Maude	1893	Barriefield.
*Hyland, David	1881	(Deceased.)
Ireland, Alexander H.	1866	Toronto.
Ireland, James O.	1850	Toronto.
Ireland, William.	1850	Chatham.
Irvine, Richard W.	1878	Deseronto.

Name.	Date of First Registration.	Address.
Irving, Lilla B. (Farrell)	1884	Utica, N.Y.
*Jack, Hugh	1889	
Jackson, Alfred R.	1889	S. Vancouver, B.C.
Jackson, Nelson	1883	
Johnston, Ethel L.	1896	Kingston.
Johnston, William	1878	McLeod, N.W.T.
Jones, Alfred W.	1888	Kingston.
Jones, Charles P.	1887	Kingston.
Kean, Isabel H.	1890	Orillia.
*Kellock, David	1878	Kinnear's Mills.
Kemp, John W.	1888	Carp.
King, Mary A. (Marquis)	1888	Saratoga Spr'gs, N.Y.
Kingsbury, H. C. W.	1896	Roseham, P.Q.
Kingston, E. A.	1894	Picton.
Kirkpatrick, Kathleen	1897	Kingston.
Kirkwood, Daniel H.	1883	
*Laing, Douglass	1899	Kingston.
*Lamont, Hugh, D.D.	1861	(Deceased.)
Lane, Morgan	1863	Clayton, Ont.
Lapsley, N. T. R.	1893	Toronto.
Larmer, Elizabeth E.	1895	Millbrook.
*Legere, Prosper L.	1856	(Deceased.)
Lingwood, F. H.	1895	Lakefield.
Lindsay, Ethel M.	1893	Kingston.
Lochead, H. S.	1893	Centreville.
Mabee, G. E.	1896	Port Hope.
*Madill, James C.	1889	Balmoral, Man.
Magee, R. W.	1898	Fort William.
Malloy, William	1865	
Malone, Vida	1898	Toronto.
Maudson, W. H.	1894	Kingston.
Maxwell, John	1887	Alton.
Meade, H.	1895	Nassagaweya.
Menzies, A. D.	1888	Beachburg.
Metcalfe, H. H.	1893	Kingston.
*Miller, David	1884	Winkley, Man.
Miller, Margaret D.	1895	Keene.
Milliken, J. B.	1894	Springbank.
Mills, James McV.	1884	Elsinore.
Minnes, James A.	1885	Kingston.
Minnes, Ethel G.	1895	Kingston.
Mohr, F. C.	1895	Arnprior.
Moodie, R. T.	1893	Perth.
Moir, Robert	1878	
Moore, J. L.	1896	Toronto.
Motherill, James W.	1873	(Deceased.)
Morton, Thomas P.	1890	Ottawa.

Name.	Date of First Registration.	Address.
*Muckleston, W. J.	1864	Perth.
*Mullin, Elias.	1861	Toronto.
*Mullan, J. B.	1856	Fergus.
*Mullan, J. S.	1854	Stanley, N.B.
Mulock, William R.	1865	Winnipeg.
Munro, Donald G.	1880	Port Douglas, Man.
Murray, Elizabeth C., (Turnbull)	1896	Ottawa.
Murray, Thomas N.	1890	Orillia.
Macallister, Lachlin, M.D.	1861	Duntroon.
Macdonald, H. J.	1865	Winnipeg.
Macnee, Walter H.	1879	Kingston.
McArthur, Bessie.	1888	Kingston.
McArthur, Charles.	1879	
*McArthur, Dugald O.	1890	Melrose.
McArthur, John M.	1878	Fruitvale, Cal.
Macaulay, J.	1895	Montreal.
McCaig, J.	1894	Prescott.
McConnell, Jennie M.	1898	Dresden.
McConville, Jane.	1895	Kingston.
McDonnell, Allen.	1885	
*McDonald, Donald D.	1885	Keene.
McDonald, Duncan.	1898	Admaston.
McDonald, P. D.	1896	Ottawa.
McDougall, Archibald J.	1891	Newburgh, N.Y.
McDonald, Belle, (Boyd)	1890	Kingston.
McDonald, William.		(Deceased.)
*McEachern, Charles	1873	Inverness, Scotland.
McEachern, Duncan.	1860	Sault Ste. Marie.
McEwen, Thomas.	1883	
*McFayden, Allen L., B.A.	1887	Chester.
McGeach, William, M.D.	1861	Fingal.
*McGillivray, Alexander	1871	Toronto.
McGregor, Alexander.	1862	Williamstown.
McGregor, A. A.	1896	Williamstown.
McIntosh, Hugh.	1876	
McIntyre Andrew B.	1887	(Deceased.)
McIntyre, A. B.	1891	
*McIntyre, C. E.	1863	Oshawa.
McKay, Daniel C.	1889	Kingston.
*McKay, Norman T. C.	1883	Toronto.
McKenzie, John J.		
McKenty, D.	1894	Kingston.
McKerracher, Mary.	1896	Ottawa.
*McKinnon, John.	1842	(Deceased.)
*McLarin, Archibald.	1878	Springfield, Man.
McLean, Archibald B.	1865	Smith's Falls.
McLean, A. E.	1895	Williamstown.

Name.	Date of First Registration.	Address.
McLean, A. L.	1895	Berwick.
McLean, Donald A.	1877	
McLean, John	1874	(Deceased.)
McLennan, Duncan L.	1887	Kincardine.
Maclennan, John D.	1889	(Deceased.)
McLennan, Neil K.	1888	Middle River, C.B.
*McLeod, Alexander K.		Brighton.
McLeod, Charles L.	1889	
McLeod, Janey A.	1894	Kingston.
*McMillan, George, B.A.	1875	Kentville, N.S.
McNab, Frank	1880	Kingston.
McNaughton, Alexander	1888	Manitoba.
McNaughton, Alexander K.	1887	Marcellus, N.Y.
*McNeil, John	1880	Cowal.
McNutt, George A.	1878	
McPherson, E. A.	1896	Prescott.
*McPherson, Lachlin	1842	(Deceased.)
MacRae, F. A.	1894	Big Baddeck, C.B.
McRae, J. F.	1893	Glen Robertson.
McRae, Philip K.	1888	North River, C.B.
McRossie, Allen	1880	New York.
McRossie, Hattie (McCammon)	1887	
Nelson, John	1887	Bearbrook.
Nichol, C. O.	1895	Binbrook.
O'Connor, Edward J.	1888	Ottawa.
O'Connor, W. J.	1894	Deseronto.
O'Donnell, E. J.	1893	Kingston.
Oronhyatekha, W. A. H.	1888	Toronto.
Osborne, N. A.	1897	Waterville, N.S.
Ovens, Rufus K.	1879	Wilton.
Paine, Charles C.	1889	
Park, R.	1894	Goderich.
Patterson	1897	Stella.
*Paul, James T.	1842	(Deceased.)
*Percival, Herbert A.	1886	Mishawakena, Ind.
Pollock, John R.	1877	(Deceased.)
Pooke, Margaret E.	1896	Perth.
*Porteous, George	1854	(Deceased.)
Potter, J. S.	1894	Kingston.
Powell, G. L.	1894	Sutton West.
Pratt, Abraham A.	1879	
Purdy, Mary E. F.	1886	
Quincey, J. A.	1898	Thornby.
*Rattee, Edward J., B.A.	1890	Noel, N.S.
Read, G. E.	1896	Rock Island, Que.
Renton, Lucinda J.		Kingston.
Renton, Thomas T.	1879	Kingston.

Name.	Date of First Registration.	Address.
Reynolds, Annie F.	1894	Gananoque.
Reynolds, Mary E.	1894	Gananoque.
Richards, Salt.	1883	
Richardson, John.	1891	Brockville.
Riddell, Alexander F.	1867	Montreal.
Rielly, F. V.	1898	Sydenham.
*Robertson, John.	1884	Hopewell, N.S.
Robertson, John D.	1859	Tarrawonga, Vic.
Roddick, James A.	1887	Lyndhurst.
Rose, Constance B.	1892	Ottawa.
*Rose, G. W.	1889	Warsaw.
Ross, Irvine.	1866	(Deceased.)
*Ross, Archibald.	1872	New York.
*Ross, Donald.	1853	Seattle.
*Ross, Hugh.	1884	
Ross, K. J. Livingstone.	1879	Seattle.
Ross, Thomas B.	1886	Montreal.
Roland, John S.	1889	Toronto.
Rowland, J.	1898	Montreal.
Roy, Henry.	1880	Chisholm, P.E.I.
Ruttan, A. C.	1895	Kingston.
Scammell, Gertrude.	1895	Joyceville.
*Scott, Marcus	1891	Detroit.
Scott, T. K.	1897	Iron Bridge, Algoma.
Shanks, William J.	1879	Chicago.
Sherlock, John M.	1879	Toronto.
Shirreff, Robert M.	1893	Fitzroy Harbour.
Shurtleff, M.	1895	Glenburnie.
*Shore, Godfrey.	1881	(Deceased.)
Simpson, Hugh.	1897	Orono.
Simpson, W. H. S.	1889	Brockville.
Sinclair, Jennie V.	1887	Indore, India.
Smith, A. F.	1897	Kingston.
Smith, Clifford E.	1893	Fairfield East.
Smith, Frederick.	1852	(Deceased.)
Smith, James.	1877	Toronto.
Smith, John.	1897	Renfrew.
Smith, John E.	1889	Arnot.
Smith, Robert L.	1879	Appleton, Wis.
*Smith, William S.	1877	(Deceased.)
*Smith, Thomas G., D.D.	1847	(Deceased.)
*Snodgrass, John A.	1868	Scotland.
Snyder, J. B.	1896	Lancaster.
Spear, R.	1893	Cobourg.
*Spencer, Hugh J.	1889	Winchester.
Spottswood, M. G.	1894	
Steen, Henrietta.	1888	Farran's Point.

Name.	Date of First Registration.	Address.
Steers, Cherry (Primrose)	1893	New York.
Stewart, Alexander S.	1878	(Deceased.)
Stewart, Daniel.	1883	(Deceased.)
Stewart, James A.	1892	Carleton Place.
Stewart, R.	1893	Bluevale.
Stewart, R. T.	1895	Mitchell.
Stewart, William R.	1887	Notre-de-Laus, Que.
*Strachan, Donald.	1865	Guelph.
Strange, O. S., M.D.	1842	Kingston.
Sullivan, P. H.	1893	Kingston.
Swales, Olive.	1892	
Swets, Florence E.	1893	Montreal.
*Sym, F. Petry.	1884	(Deceased.)
*Taft, J. N.	1877	Brooklyn, N.Y.
Taggart, Robert.	1890	Cardiff, Assa.
Tandy, R. H. Norma (Williamson)	1896	Kingston.
*Taylor, Hugh.	1873	Loch Winnoch.
Telgmann, Henrich B.	1887	New York.
*Thom, Leslie W.	1877	Flesherton.
Thomas, Henry P.	1882	Belleville.
Thompson, Andrew W.	1879	(Deceased.)
*Thompson, Archibald, B.A.	1890	Hepworth, Ont.
Topliffe, Annie (Lapp)	1891	Glenvale.
Tracy, Thora D.	1897	Kingston.
Tripp, J. H.	1894	Fitzroy Harbour.
Twitchell, Marshall C.	1887	Burlington.
Van Blaricom, George B.	1889	
Varcoe, George F.	1886	Fenelon Falls.
Voaden, A.	1896	St. Thomas.
Wagner, W. G.	1894	South Bend, Indiana.
Waldron, Edward W.	1889	Kingston.
Walkem, Hugh.	1875	Spence's Bridge, B.C.
Walkem, Walter, C.A.	1886	(Deceased.)
*Wallace, Robert.	1842	(Deceased.)
Ward, David.	1850	Almonte.
Ward, Marjory.	1889	Renfrew.
Watson, Angus R.	1885	
Welch, Frederick.	1867	Kingston.
White, Mary H., (Cosgrove)	1893	Stratford.
Whyte, W. M.	1893	Pakenham.
*Wilkins, T. W., B.A.	1863	Trenton.
Wilkie, Isabella.	1896	Carleton Place.
Williams, A. S.	1896	Newmarket.
Wilson, Daniel A.	1886	Kingston.
Wilson, Samuel.	1888	Allan's Mills.
Witheril, Ebenezer.	1889	Westport.

Name.	Date of First Registration.	Address.
Wright, Henry A.	1879	Trenton.
Young, J. A.	1894	London.
Young, E. T.	1895	Toronto.
Young, John G.	1892	Bristol, Que.
Young, William.	1886	Peterboro.
Yourex, Edmund L.	1887	Kingston.

ALUMNI ASSOCIATION.

The Registrar will be much obliged for notice of additions or corrections to this list.

QUEEN'S ALUMNI SOCIETY OF TORONTO.

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Secretary-Treasurer.....A. H. Beaton, B.A.

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- Dr. Bryson,

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- J. C. Spence,
- J. F. Waters,
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- Dr. Le Sueur,
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Junior Latin.

Translate :

Aeneas moesta defixus lumina vultu
Ingreditur, linquens antrum; caecosque volutat
Eventus animo secum. Cui fidus Achates
It comes, et paribus curis vestigia figit.
Multa inter sese vario sermone serebant:
Quem socium exanimem vates, quod corpus humandum
Diceret. Atque illi Misenum in litore sicco,
Ut venere, vident indigna morte peremptum,
Misenum Aeoliden, quo non praestantior alter
Aere ciere viros, Martemque accendere cantu.
Hectoris hic magni fuerat comes; Hectora circum
Et lituo pugnas insignis obibat et hasta.

1. Scan the first three lines.

2. Account for the case of *lumina, curis;* and the mood of *diceret.*

3. Describe briefly the contents of the Sixth Book.

Translate :

Laudabunt alii claram Rhodon aut Mytilenen
Aut Epheson bimarisve Corinthi
Moenia vel Baccho Thebas vel Apolline Delphos
Insignis aut Thessala Tempe;
Sunt quibus unum opus est intactae Palladis urbem
Carmine perpetuo celebrare et
Undique decerptam fronti praeponere olivam;
Plurimus in Iunonis honorem
Aptum dicet equis Argos ditisque Mycenas:
Me nec tam patiens Lacedaemon
Nec tam Larisae percussit campus opimae
Quam domus Albuneae resonantis
Et praeceps Anio ac Tiburni lucus et uda
Mobilibus pomaria rivis.

1. State briefly the theme of the Ode.

2. State the grammatical connection of *Thessala.*

3. Mention the *four* attractions of Tibur.

Translate :

XXI. Age nunc iter expediti latronis cum Milonis impedimentis comparate. Semper ille antea cum uxore, tum sine ea; numquam nisi in raeda, tum in equo; comites Graeculi, quocumque ibat, etiam cum in castra Etrusca properabat; tum nugarum in comitatu nihil. Milo, qui numquam, tum casu pueros symphoniacos uxoris ducebat et ancillarum greges; ille, qui semper secum scorta duceret, tum neminem, nisi ut virum a viro lectum esse diceres. Cur igitur victus est? Quia non semper viator a latrone, non numquam etiam latro a viatore occiditur; quia, quamquam paratus in imparatos, tamen mulier inciderat in viros. Nec vero sic erat umquam non paratus Milo, contra illum ut non satis fere esset paratus. Semper ipse et quantum interesset P. Clodi se perire et quanto illi odio esset et quantum ille auderet cogitabat.

1. In *Castra Etrusca.* What allusion is there here?
2. *Qui Duceret.* Explain the mood.
3. *Quantum Interesset.* What is the construction?

Translate into Latin :

News was brought into the city that a large force of the enemy were now approaching. It was clear that they were too numerous to be resisted. Messengers were therefore sent in different directions to summon help. For this purpose they sent into the fields the swiftest horsemen they had. The magistrates encouraged all by rich rewards to return to the city as soon as possible, and Italy is so covered with dense trees that it was easy to escape from the field and to return unobserved. Our men, as soon as they entered the walls, received orders to assault the enemy, who were just outside the gates. Being surprised they betook themselves to flight, with such alarm that they did not halt until they reached the river.

Sight translation :

FRIENDSHIP OF COELIUS AND CATILINE.

Studuit Catilinae, quum iam aliquot annos esset in foro, Coelius: et multi hoc idem ex omni ordine atque ex omni aetate fecerunt. Habuit enim ille, sicuti meminisse vos arbitror, permulta maximarum non expressa signa, sed adumbrata virtutum. Utebatur hominibus improbis multis, et quidem optimis se viris deditum esse simulabat. Neque ego unquam fuisse tale monstrum in terris illum puto, tam ex contrariis diversisque et inter se pugnantibus naturae studiis cupiditatibusque conflatum.

Senior Latin.

[Extra-mural students may answer questions 4, 6 (*b*), and 8, OR take three additional topics (one for one) in the last question.]

1. Translate:

"Quaesturam una petiit, et sum ego factus prior." Non est respondendum ad omnia. Neque enim vestrum quemquam fugit, cum multi pares dignitate fiant, unus autem primum *locum* solus possit obtinere, non eundem esse ordinem dignitatis et renuntiationis, propterea quod renuntiatio gradus habeat, dignitas autem sit persaepe eadem omnium. Sed quaestura utriusque propemodum pari momento sortis fuit. Habuit hic lege Titia provinciam tacitam et quietam, tu illam, cui, cum quaestores sortiuntur, etiam adclamari solet, Ostiensem, non tam gratiosam et illustrem quam negotiosam et molestam. CICERO, *Pro Murena* viii.

2. Write notes on *coemptio* and *ambitus*, and give the argument on which Cicero chiefly relies to win his case.

3. Translate:

Interim Galli, postquam accepere, ultro honorem habitum violatoribus iuris humani, elusamque suam legationem esse, flagrantes ira, cuius impotens est gens, confestim signis convulsis, citato agmine iter ingrediuntur. Ad quorum praetereuntium raptim tumultum quum exterritae urbes ad arma concurrerent, fugaque agrestium fieret, Romam se ire, magno clamore significabant, quacunque ibant, equis virisque longe ac late fuso agmine immensum obtinentes loci. Sed, antecedente fama nuntiisque Clusinorum, deinceps inde aliorum populorum, plurimum terroris Romam celeritas hostium tulit: quippe quibus, velut tumultuario exercitu raptim ducto, aegre ad undecimum lapidem occursum est. LIVY v. xxxvii.

4. Deduce from Camillus' speech against migration to Veii Livy's conception of the best way to sway a Roman audience.

5. Translate:

DE. Disrumpor. SY. Argentum adnumerauit ilico:
Dedit praeterea in sumptum dimidium minae:
Id distributum sanest ex sententia. DE. Hem,
Huic mandes, siquid recte curatum uelis.

Sy. Ehem Demea, haud aspexeram te : quid agitur ?
De. Quid agatur ? Vostram nequeo mirari satis
Rationem. Sy. Est hercle inepta, ne dicam dolo,
Absurda. Piscis ceteros purga, Dromo:
Congrum istum maxumum in aqua sinito ludere
Tantisper : ubi ego rediero, exossabitur:
Prius nolo. TERENCE, *Adelphi*, 369-379.

6. (*a*) Account for each subjunctive mood in the above passage. (*b*) Briefly state the teaching of the *Adelphi* and the means employed by the poet to bring it home to his audience.

7. Translate :

"Rhaebe, diu, res siqua diu mortalibus ulla est,
Viximus. Aut hodie victor spolia illa cruenti
Et caput Aeneae referes Lausique dolorum
Ultor eris mecum aut, aperit si nulla viam vis,
Occumbes pariter ; neque enim, fortissime, credo,
Iussa aliena pati et dominos dignabere Teucros."
Dixit et exceptus tergo consueta locavit
Membra manusque ambas iaculis oneravit acutis,
Aere caput fulgens cristaque hirsutus equina.
VERGIL, *Aeneid* x. 861-869.

8. Comment upon Vergil's treatment of battle scenes.

9. A SUCCESSFUL SORTIE.

Translate :

At hostes sine fide tempus atque occasionem fraudis ac doli quaerunt ; interiectisque aliquot diebus, nostris languentibus atque animo remissis, subito meridiano tempore, cum alius discessisset, alius ex diutino labore in ipsis operibus quieti se dedisset, arma vero omnia reposita contectaque essent, portis se foras erumpunt, secundo magnoque vento ignem operibus inferunt. Hunc sic distulit ventus, uti uno tempore agger, plutei, testudo, turris, tormenta flammam conciperent, et prius haec omnia consumerentur, quam quemadmodum accidisset animadverti posset. Nostri repentina fortuna permoti arma, quae possunt, arripiunt. Fit in hostis impetus eorum, sed muro sagittis tormentisque fugientes persequi prohibentur. CAESAR, *De Bello Civili* ii. x.

10. Translate into Latin :

Before the besiegers could storm the forts, 250 Punic battleships cast anchor in the harbour. Had the brave Admiral arrived one day later the city would have fallen. But inasmuch as he quickly

landed in boats his infantry, archers and slingers with weapons and supplies for those he came to help, and did himself lead most skilfully the defending forces, the Roman assault, instead of resulting in the victory they hoped for, was everywhere beaten off. Hanno's energy, courage and other good qualities so delighted the townsfolk that they voted him a million sesterces. But, with rare magnanimity, he refused this token of their gratitude and generosity, asking them to use the money to relieve their countrymen's distress.

11. Write briefly on ANY THREE* of the following: Latin literature under Tiberius; the reign of Trajan; a Roman house; the Northern frontier from 14-180 A.D.; Tacitus; provincial administration under the Empire; the development of the Dyarchy into a limited monarchy; the revolutions of 68-69; Hellenic literature in this age.

* Extra-murals see above.

Junior Greek.

Translate:

ὁ δέ μοι πόρεν ἀγλαὰ δῶρα·
χρυσοῦ μέν μοι δῶκ' εὐεργέος ἑπτὰ τάλαντα,
δῶκε δέ μοι χρητῆρα πανάργυρον, αὐτὰρ ἔπειτα
οἶνον ἐν ἀμφιφορεῦσι δυώδεκα πᾶσιν ἀφύσσας
ἡδὺν ἀκηράσιον, θεῖον ποτόν· οὐδέ τις αὐτὸν
ἠείδη δμώων οὐδ' ἀμφιπόλων ἐνὶ οἴκῳ,
ἀλλ' αὐτὸς ἄλοχός τε φίλη ταμίη τε μί' οἴη.
τὸν δ' ὅτε πίνοιεν μελιηδέα οἶνον ἐρυθρὸν,
ἓν δέπας ἐμπλήσας ὕδατος ἀνὰ εἴκοσι μέτρα
χεῦ', ὀδμὴ δ' ἡδεῖα ἀπὸ κρητῆρος ὀδώδει,
θεσπεσίη· τότ' ἂν οὔ τοι ἀποσχέσθαι φίλον ἦεν.
τοῦ φέρον ἐμπλήσας ἀσκὸν μέγαν, ἐν δὲ καὶ ἦια
κωρύκῳ· αὐτίκα γάρ μοι ὀίσατο θυμὸς ἀγήνωρ
ἄνδρ' ἐπελεύσεσθαι μεγάλην ἐπιειμένον ἀλκὴν,
ἄγριον, οὔτε δίκας εὖ εἰδότα οὔτε θέμιστας.

1. Scan the first four verses.
2. Parse ἠείδη, πίνοιεν, ἐμπλήσας, χεῦ'.
3. In what sense is ἀνὰ used?

Translate:

Σπουδῇ οὖν βαδίζοντες ἐφιστάμεθα πρεσβύτῃ καὶ νεανίσκῳ, μάλα προθύμως πρασιάν τινα ἐργαζομένοις καὶ ὕδωρ ἀπὸ τῆς πηγῆς ἐπ' αὐτὴν διοχετεύουσιν· ἡσθέντες οὖν ἅμα καὶ φοβηθέντες ἔστημεν· κἀκεῖνοι δὲ, ταὐτὸν ἡμῖν ὡς τὸ εἰκὸς παθόντες, ἀναυδοι παρεστήκεσαν· χρόνῳ δὲ ὁ πρεσβύτης ἔφη, "Τίνες ἄρα ὑμεῖς ἐστὲ, ὦ ξένοι; πότερον," ἔφη, "τῶν ἐναλίων δαιμόνων, ἢ ἄνθρωποι δυστυχεῖς ἡμῖν παραπλήσιοι; καὶ γὰρ ἡμεῖς ἄνθρωποι ὄντες καὶ ἐν γῇ

τραφέντες νῦν θαλάττιοι γεγόναμεν, καὶ συννηχόμεθα τῷ περιέχοντι τούτῳ θηρίῳ, οὐδ' ἃ πάσχομεν ἀκριβῶς εἰδότες. τεθνάναι μὲν γὰρ εἰκάζομεν, ζῆν δὲ πιστεύομεν." πρὸς ταῦτα κἀγὼ εἶπον· "Καὶ ἡμεῖς τοι ἄνθρωποι νεήλυδες ἐσμὲν, ὦ πάτερ, αὐτῷ σκάφει πρώην καταποθέντες. προήλθομεν δὲ νῦν βουλόμενοι μαθεῖν τὰ ἐν τῇ ὕλῃ ὡς ἔχει.

4. *διοχετεύουσιν.* Explain its agreement.

5. Parse *ἑστημεν, παθόντες, τραφέντες, τεθνάναι.*

6. *αὐτῷ σκάφει.* Explain the construction.

Translate into Greek :

"But why," said Socrates, "did you not point out the young man to me and call him here? Certainly it would be quite right for me to converse with him in your presence, as you are both his guardian and his cousin." Then Kritias answered, "You speak right well, Socrates, and therefore we shall call him." Then to the attendant he said, "Slave, call Charmides, and tell him that I wish to introduce him to the doctor." For you must know that lately when rising in the morning he used to complain of his head troubling him greatly.

Sight translation :

Ἐντεῦθεν ὁ Ἡρακλείδης ἠχθέσθη τε καὶ ἔδεισε μὴ ἐκ τῆς Σεύθου φιλίας ἐκβληθείη, καὶ ὅ,τι ἐδύνατο ἀπὸ ταύτης τῆς ἡμέρας Ξενοφῶντα διέβαλλε πρὸς Σεύθην. οἱ μὲν δὴ στρατιῶται Ξενοφῶντι ἐνεκάλουν ὅτι οὐκ εἶχον τὸν μισθόν. Σεύθης δὲ ἤχθετο αὐτῷ ὅτι ἐντόνως τοῖς στρατιώταις ἀπῄτει τὸν μισθόν. καὶ τέως μὲν ἀεὶ ἐμέμνητο ὡς, ἐπειδὰν ἐπὶ θάλατταν ἀπέλθῃ, παραδώσει αὐτῷ Βισάνθην καὶ Γάνος καὶ Νέον τεῖχος· ἀπὸ δὲ τούτου τοῦ χρόνου οὐδενὸς ἔτι τούτων ἐμέμνητο. ὁ γὰρ Ἡρακλείδης καὶ τοῦτο διεβεβλήκει ὡς οὐκ ἀσφαλὲς εἴη τείχη παραδιδόναι ἀνδρὶ δύναμιν ἔχοντι.

Senior Greek.

1. Translate:

τόφρα δ' ἄρ, ἦ γ' ὑποδῦσα θαλάσσης εὐρέα κόλπον
τέσσαρα φωκάων ἐκ πόντου δέρματ' ἔνεικεν·
πάντα δ' ἔσαν νεόδαρτα· δόλον δ' ἐπεμήδετο πατρί.
εὐνὰς δ' ἐν ψαμάθοισι διαγλάψασ' ἁλίησιν
ἧστο μένουσ'· ἡμεῖς δὲ μάλα σχεδὸν ἦλθομεν αὐτῆς·
ἐξείης δ' εὖννησε, βάλεν δ' ἐπὶ δέρμα ἑκάστῳ.
ἔνθα κεν αἰνότατος λόχος ἔπλετο· τεῖρε γὰρ αἰνῶς
φωκάων ἁλιοτρεφέων ὀλοώτατος ὀδμή·
τίς γάρ κ' εἰναλίῳ παρὰ κήτεϊ κοιμηθείη;
ἀλλ' αὐτὴ ἐσάωσε καὶ ἐφράσατο μέγ' ὄνειαρ.
ἀμβροσίην ὑπὸ ῥῖνα ἑκάστῳ θῆκε φέρουσα
ἡδὺ μάλα πνείουσαν, ὄλεσσε δὲ κήτεος ὀδμήν.
πᾶσαν δ' ἠοίην μείνομεν τετληότι θυμῷ·
φῶκαι δ' ἐξ ἁλὸς ἦλθον ἀολλέες. αἱ μὲν ἔπειτα
ἑξῆς εὐνάζοντο παρὰ ῥηγμῖνι θαλάσσης·
ἔνδιος δ' ὁ γέρων ἦλθ' ἐξ ἁλός, εὗρε δὲ φώκας
ζατρεφέας, πάσας δ' ἄρ' ἐπῴχετο, λέκτο δ' ἀριθμόν.
ἐν δ' ἡμέας πρώτους λέγε κήτεσιν, οὐδέ τι θυμῷ
ᾠίσθη δόλον εἶναι· ἔπειτα δὲ λέκτο καὶ αὐτός
ἡμεῖς δὲ ἰάχοντες ἐπεσσύμεθ', ἀμφὶ δὲ χεῖρας
βάλλομεν· οὐδ' ὁ γέρων δολίης ἐπελήθετο τέχνης,
ἀλλ' ἦ τοι πρώτιστα λέων γένετ' ἠγερέθοντι,
αὐτὰρ ἔπειτα δράκων καὶ πάρδαλις ἠδὲ μέγας σῦς·
γίγνετο δ' ὑγρὸν ὕδωρ καὶ δένδρεον ὑψιπέτηλον.
ἡμεῖς δ' ἀστεμφέως ἔχομεν τετληότι θυμῷ.

Odyssey, iv. 435-459.

2. Comment on the following forms: *ἀολλέες, ἀμβροσίην, νέποδες ἁλοσύδνης, ἄσμενος*; the precise force of *τέο σε χρή*;. Account for optatives in

ἦέ τιν' ἀγγελίην στρατοῦ ἔκλυεν ἐρχομένοιο,
ἦν χ' ἡμῖν σάφα εἴποι, ὅτε πρότερός γε πύθοιτο ;

How would χ' ἡμῖν εἴποι appear in Attic prose?

3. How does Homer compare with ballad poetry and literary epic?

4. Translate and explain :

Ὅτε δὲ ἦλθε Πετρος εἰς Ἀντιόχειαν, κατὰ πρόσπωπον αὐτῷ ἀντέστην, ὅτι κατεγνωσμένος ἦν. πρὸ τοῦ γὰρ ἐλθεῖν τινας ἀπὸ Ἰακώβου μετὰ τῶν ἐθνῶν συνήσθιεν· ὅτε δὲ ἦλθον, ὑπέστελλε καὶ ἀφώριζεν ἑαυτὸν, φοβούμενος τοὺς ἐκ περιτομῆς· καὶ συνυπεκρίθησαν αὐτῷ καὶ οἱ λοιποὶ Ἰουδαῖοι, ὥστε καὶ Βαρνάβας συναπήχθη αὐτῶν τῇ ὑποκρίσει. Ἀλλ' ὅτε εἶδον ὅτι οὐκ ὀρθοποδοῦσι πρὸς τὴν ἀλήθειαν τοῦ εὐαγγελίου, εἶπον τῷ Πέτρῳ ἔμπροσθεν πάντων, "Εἰ σὺ Ἰουδαῖος ὑπάρχων, ἐθνικῶς ζῇς καὶ οὐκ Ἰουδαϊκῶς, τί τὰ ἔθνη ἀναγκάζεις Ἰουδαΐζειν;" GALATIANS, II. 11-14.

5. Translate :

πέμπουσιν οὖν τριήρη ὡς Πάχητα ἄγγελον τῶν δεδογμένων, κατὰ τάχος κελεύοντες διαχρήσασθαι Μυτιληναίους. καὶ τῇ ὑστεραίᾳ μετάνοιά τις εὐθὺς ἦν αὐτοῖς καὶ ἀναλογισμὸς ὠμὸν τὸ βούλευμα καὶ μέγα ἐγνῶσθαι, πόλιν ὅλην διαφθεῖραι μᾶλλον ἢ οὐ τοὺς αἰτίους. ὡς δ' ἤσθοντο τοῦτο τῶν Μυτιληναίων οἱ παρόντες καὶ οἱ αὐτοῖς τῶν Ἀθηναίων ξυμπράσσοντες, παρεσκεύασαν τοὺς ἐν τέλει ὥστε αὖθις γνώμας προθεῖναι· καὶ ἔπεισαν ῥᾷον, διότι καὶ ἐκείνοις ἔνδηλον ἦν βουλόμενον τὸ πλέον τῶν πολιτῶν αὖθίς τινας σφίσιν ἀποδοῦναι βουλεύσασθαι, καταστάσης δ' εὐθὺς ἐκκλησίας ἄλλαι τε γνῶμαι ἀφ' ἑκάστων ἐλέγοντο καὶ Κλέων ὁ Κλεαινέτου, ὅσπερ καὶ τὴν προτέραν ἐνενικήκει ὥστε ἀποκτεῖναι, ὢν καὶ ἐς τὰ ἄλλα βιαιότατος τῶν πολιτῶν τῷ τε δήμῳ παρὰ πολὺ ἐν τῷ τότε πιθανώτατος, παρελθὼν αὖθις ἔλεγε τοιάδε. THUCYDIDES, III. ch. 36.

6. What are Cleon's arguments in the Mitylenean debate? Give the grounds for the extreme resentment felt by the Athenians at this time.

7. Translate into Greek one of the following, (*a*) or (*b*):

(*a*) It was night, when a messenger arrived with tidings of the capture of Elateia. Thereupon the magistrate sent for the generals, called out the trumpeter, and as soon as it was light summoned the council; while the whole people proceeded to the place of assembly. When they had taken their seats the messenger was introduced and delivered his message. The herald followed with the question, "Does any one desire to address the assembly?" but no one came forward to speak.

They say not falsely; for the artist is of a buoyant nature, winged and sacred, and unable to create until he becomes divinely inspired. For that which moves him is not skill, but a divine power, as in the stone which Euripides called Magnetis.

(*b*) This winter was marked by the purification of Delos, a measure undertaken formerly by Peisistratos, but only partially carried out. On that occasion the tyrant had purified as much as was within view of the temple, and now the Athenians, acting on the advice of an oracle, included the whole island in their operations. The dead were removed from all the tombs and it was ordained that henceforth no one should die on the sacred island. In a new form too they revived the Delian festival, celebrated in the Homeric Hymn to Apollo, the festival to which "the long-robed Ionians gathered, and made thee glad, O Phoebus, with boxing, dancing and song."

8. Translate.

Αἶαν, παῖ Τελαμῶνος ἀμύμονος, οὐκ ἄρ' ἔμελλες
οὐδὲ θανὼν λήσεσθαι ἐμοὶ χόλου εἵνεκα τευχέων
οὐλομένων; τὰ δὲ πῆμα θεοὶ θέσαν Ἀργείοισιν.
τοῖος γάρ σφιν πύργος ἀπώλεο· σεῖο δ' Ἀχαιοὶ
ἶσον Ἀχιλλῆος κεφαλῇ Πηληιάδαο
ἀχνύμεθα φθιμένοιο διαμπερές. οὐδέ τις ἄλλος
αἴτιος, ἀλλὰ Ζεὺς Δαναῶν στρατὸν αἰχμητάων
ἐκπάγλως ἤχθηρε, τεὶν δ' ἐπὶ μοῖραν ἔθηκεν.
ἀλλ' ἄγε δεῦρο, ἄναξ, ἵν' ἔπος καὶ μῦθον ἀκούσῃς
ἡμέτερον· δάμασον δὲ μένος καὶ ἀγήνορα θυμόν.

ὣς ἐφάμην, ὁ δέ μ᾽ οὐδὲν ἀμείβετο, βῆ δὲ μετ᾽ ἄλλας
ψυχὰς εἰς ἔρεβος νεκύων κατατεθνηώτων.
ἔνθα χ᾽ ὅμως προσέφη κεχολωμένος, ἤ κεν ἐγὼ τόν·
ἀλλά μοι ἤθελε θυμὸς ἐνὶ στήθεσσι φίλοισιν
τῶν ἄλλων ψυχὰς ἰδέειν κατατεθνηώτων.

ODYSSEY, XI. 553-567.

Junior and Senior German Dictation.

Sie ist eine grosse Dame geworden und hat ein Haus voll Kinder. Wenn sie wüsste, dass ich Sie hier wiedergefunden habe! Erst vor einem Monate sprachen wir von Ihnen. Sie stehen noch im besten Andenken bei ihr, und jenen schönen Winternachmittag, wo wir Ihnen die Anfangsgründe des Schlittschuhlaufens beibrachten, hat sie durchaus nicht vergessen. Sie behauptet, damals von Ihnen einen Händedruck erhalten zu haben, der wärmer gewesen sie, als Ihr nachheriges Benehmen gerechtfertigt habe. Seitdem liegt über dem sonst sehr vortheilhaften Bilde, das sei von Ihnen bewahrt, ein böser Schlagschatten des Leichtsinns.

Junior German.

I.

1. Translate at sight:

(*a*) Die Gräfin war aber nicht todt, und auch ihr Söhnlein war noch am Leben. Als sie von übergrossem Weh bezwungen, heimlich das Schloss verlassen hatte, war sie ohne Weg und Ziel in den wilden Wald hineingeschritten. Sie ging die ganze Nacht hindurch und trug das schlafende Kind auf dem Arm. Aus dem Dunkel des Tanns leuchteten zuweilen die Augen der Grauhunde, aber sie thaten der armen Mutter nichts zu Leide. Gegen Morgen, als kältender Wind durch die Bäume wehte, wollten sie die zarten, des Wanderns ungewohnten Füsse nicht weiter tragen. Sie sank auf das Waldmoos nieder und weinte bitterlich; erst jetzt kam ihr die Erkenntniss, dass sie sich und das Kind dem Verderben geweiht habe.

(*b*) Die schöne Frau, die nicht anders dachte, als dass ihr Geleibter, sich die Langeweile zu vertreiben, seine Morgenstunden mit Abfassung eines Liebesbriefs oder gar eines Gedichtes zugebracht habe, schickte ihre Dienerin wieder hinaus, um recht ungestört diese frühe Huldigung zu geniessen. Als sie aber das Briefchen öffnete, fiel ein Ring heraus,—derselbe, den sie gestern Abend dem stürmischen Werber als Pfand gelassen, und mit erröthenden Wangen las sie die folgenden Zeilen:

„Theure, ewiggeliebte Frau! u. s. w.

2. Translate:

Kaum hat das Wasser als Regen den Boden berührt, so beginnt auch schon die Zerstörung und das Bestreben, wieder zum Meere zurückzueilen. Der Weg, den es hierbei einschlägt, ist ein doppelter: der eine Teil fliesst auf der Oberfläche weg und führt dabei alle Hindernisse mit sich, welche sich ihm in den Weg stellen, seine Tätigkeit ist also eine mechanische; ein anderer Teil dringt in die Tiefe ein und wirkt dort durch Zersetzung der Gesteine auf chemischem Wege. Wir wollen zunächst diesen Prozess etwas eingehender verfolgen.

(*a*) Give principal parts of all the irregular verbs of above passage.

(*b*) Give present indicative in full of *hat*, *einschlägt*, *ist*, *wollen*.

(*c*) *den es hierbei einschlägt.* Reconstruct the whole sentence so as to transform this relative clause into an adjective.

3. Uebersetze man ins Englishe und gebe man andere deutsche Wendungen mit gleicher Bedeutung:

Was das für Reden sind.—Davon ist nicht die Rede.—Sage die Paar Worte mir zu Liebe.—Es ist an dir nachzugeben.—Du bestehst auf deinem Kopf.—Er that es aus freien Stücken.—er führt grosse Rede über sein Glück.—so dass ihr die Augen übergingen.—Bertha begann.....zog aber dabei den Kürzeren.

4. Man gebe kurz gefasst in deutscher Sprache den Inhalt von zwei der folgenden Geschichten an:

„Das stälerne Schloss"
„Die gefangene Druide."
„Ein Gebet."

II.

1. Translate into German:

What difference would it make?—He makes the best of a bad bargain.—It is not worth mentioning.—He understands such things.—That must be explained.—That concerns the children only.—I care nothing about this foolish thing.—Let her live for the present.—They got into a violent quarrel.—Raoul was to become a priest.—His mother had been a great sinner.—He spent the whole night praying and scourging himself.—Editha obeyed her mother and disobeyed her conscience.

2. A widow had two daughters, one of whom was pretty and industrious, and the other ugly and lazy. She had, however, a much greater affection for the ugly and lazy daughter because she was her own daughter, and the other had to do all the work, and was the Cinderella of the household. The poor girl was obliged to go out on the high-road every day and sit by a well and spin till her fingers bled. Now it happened once that the spindle became bloody, and she went to the well with it to wash off the blood, when it dropped out of her hands and fell in. Crying, she ran to her step-mother and told her of her misfortune. She scolded her violently, and was so unkind that she said she would not forgive her till she had fetched the spindle out of the well again.

III.

1. (*a*) What is the part played by cause and effect in ,,Ein Gebet"? (*b*) Refer to passages of special merit, with reasons. (*c*) When and where does the action of the story occur.

2. Show how the author maintains the interest throughout ,,Hochzeit auf Capri."

3. (Antworte man auf Englisch oder auf Deutsch, am liebsten aber auf Deutsch).

(*a*) Was ist die Kant-Laplace'sche Theorie der Entstehung der Erde?

(*b*) Was ist der Unterschied zwischen Strato-vulkanen und massigen Vulkanen.

Senior German.

Dictation.

Sternklare Nacht. Der Olto rauscht und braust zwischen hohen Felswänden dahin, und aus den Seitenthälern weht es kühl, wie sich die wilden Gebirgsbäche hinabstürzen und schäumend ihr Wasser mit dem seinen mischen.

In ein solches Seitenthal biegt eben eine hohe Gestalt ein, die in der Dunkelheit noch viel grösser erscheint. Der aufgehende Mond überströmt plötzlich Alles mit vollem, breitem Strahle, wodurch die Schatten noch schwärzer werden, in denen die Gestalt wieder verschwunden ist.

Er giesst sein Licht über die Dörfer, die tief im Schlummer versunken, über die Wälder, die leise athmen, über die Matten, wo Kühe ruhen und ihren Duft mit dem Dufte der unzähligen Blumen mischen.

Ietzt tritt die Gestalt auf die Matte heraus, ein Mann wie ein Tannenbaum, mit kurzer, dunkler Jacke und blitzenden Waffen im breiten Gürtel.

Senior German.

1. Translate at sight :

(*a*) So kamen sie in einen Stadttheil, in welchem leere Strassen und die Totenstille um sie herum noch unheimlicher gegen den fernen Lärm und die Röthe am Himmel abstachen. Endlich machten sie Halt vor einem niedrigen Gebäude mit grossem Thorwege. Sie traten ein und sahen in die Wirthsstube, einen schmutzigen Raum mit geschwärzten Deckbalken, in welchem sich auf Holzbänken und Tischen schreiende und Branntwein trinkende Patrioten drängten. Der junge Offizier trat auf die Schwelle und rief nach dem Wirth. Eine dicke Figur mit rothglühendem Gesicht tauchte aus dem Dampf eines Schenktisches hervor. ,,Im Namen der Regierung Zimmer für mich und meine Begleiter," forderte der Andere. Widerwillig ergriff der Wirth ein verrostetes Schlüsselbund und ein Talglicht und führte die Fremden in den Oberstock, dort öffnete er ein dumpfiges Zimmer und erklärte mürrisch, er habe keine andere Gaststube.

(*b*) Bei der nun folgenden kurzen Zusammenstellung der Formationen muss ich mich natürlich darauf beschränken, ein möglichst gedrängtes Bild der Formation im ganzen zu geben, ohne dabei auf Einzelheiten oder auf Leitfossile für bestimmte Horizonte eingehen zu können.

2. Translate :

(*a*) Die wichtigsten Massregeln dieses Merkantilsystems im einzelnen sind : Aufhebung oder doch Verminderung der Binnenzölle und Verwandlung derselben in Grenzzölle ; Bau von Strassen und Kanälen zur Erleichterung des Verkehrs ; Sicherung der Versorgung des Landes mit den nötigen Nahrungsmitteln und den nötigen Rohstoffen für die gewerbliche Produktion durch entsprechende Ausfuhrverbote.

(*b*) Die Deiche werden ihre Noth haben,—Dann hob sie aufs neue an, zu zetern —Und er liess sich mit dem Einwand abfinden,—Er ist hinterspinnig und sucht beim Deichgraf 'nen weissen Fuss zu machen.

3. Erkläre man auf Deutsch aus der ,,Volkswirtschaftslehre." (a) *Bedürfniss, freies gut, indirekter Tausch, Vermögen, Klasse,* (b) den Unterschied zwischen den Gliedern folgender Wortpaare, *Wirtschaftliche Thatigkeit* und *Wirtschaft, Genussvermögen* und *Produktionsvermögen, Klasse* und *Stand, Einzelwirtschaft* und *Gemeinwirtsehaft.*

II.

1. Translate into German :

(*a*) I have done what the dikegrave should have done before me.—At the end of November there only remained to be closed the opening near by the old dike.—She could not help obeying.—People often make a saint of a bad man or of a wicked priest.

(*b*) I intend to tell you a story that I read long ago in my great grand-mother's house. I do not now exactly remember the name of the newspaper in which it was, but I do remember how the old lady stroked my blonde hair while I was reading. I have since searched for that paper, but without effect. I cannot, therefore, vouch for the truth of the facts, but I can assure you that I have not forgotten any of them.

(*c*) A man had an ass, which had for many years faithfully carried the sacks to the mill ; but his strength began to fail, and he became more and more unfit for work. So the master thought of making an end of him ; the ass, however, perceiving that an ill wind was blowing, ran away, and took the road towards Bremen ; for there, he thought, he might become one of the town musicians. He had travelled some distance, when he found a dog lying in the road and yelping as if tired by a long run. "What are you yelping in that way for, Jowler ?" asked the ass.

2. Schreibe man auf Deutsch eine kurz gefasste Inhaltsangabe von (*a*),,Frau Sorge" oder (*b*),,Dem Verlorenen Sohn."

III.

1. Discuss the ,,Schimmelreiter" from the following points of view : (*a*) Cause and Effect, (*b*) Description, (*c*) Superstition and the Supernatural.

2. How consistently does Heyse solve the problem of ,,Der Verlorene Sohn ?"

3. Discuss the satire of the ,,Hochzeitsreise."

4. Explain the meaning of the following symbolical terms from ,,Frau Sorge" :

Frau Sorge, die Prinzess, die Seele der Prinzess, der Graue Schleier, das Opfer, die Erlösung.

5. Schreibe man auf Deutsch eine kurze Biographie von Theodor Storm nieder.

PASS.

Junior French.

Dictation.

Cette paresse effrénée l'avait rendu très populaire dans son pays. On le respectait à l'égal d'un saint. En passant devant son petit clos, les dames de la ville mettaient leurs mules au pas et se parlaient à voix basse sous leurs masques blancs. Les hommes s'inclinaient pieusememt, et, tous les jours, à la sortie de l'école, il y avait sur les murailles du jardin toute une volée de gamins en vestons de soie rayée et bonnets rouges, qui venaient essayer de déranger cette belle paresse, l'appelaient par son nom, riaient, menaient du train, lui jetaient des peaux d'oranges.

Peine perdue! Le paresseux ne bougeait pas. De temps en temps on l'entendait crier du fond de l'herbe: "gare, gare tout à l'heure, si je me lève!" mais il ne se levait jamais.

Or, il arriva qu'un de ces petits drôles, en venant comme cela faire des niches au paresseux, fut, en quelque sorte, touché par la grâce, et, pris d'un goût subit pour l'existence horizontale, déclara un matin à son père qu'il entendait ne plus aller à l'école et qu'il voulait se faire paresseux.

PASS.

Junior French.

A.

1. Write a short study of "L'Abbé Roitelet."

2. Give the chief rules for the formation of feminines in French.

3. When is the subjunctive used in French ?

4. Give the primary parts of *mourir, courir, assaillir, craindre, dormir.*

B.

Translate into English :

(*a*) Je reviens à mon texte : et dis premièrement
Qu'on ne sauroit manquer, de louer largement
Les dieux et leurs pareils; de plus, que Melpomène,
Souvent sans déroger, trafique de sa peine;
Enfin, qu'on doit tenir notre art en quelque prix
Les grands se font honneur dès lors qu'ils nous font grâce.
Jadis l'Olympe et le Parnasse
Étoient frères et bons amis

(*b*) Mais garder un aigle!...Si je lâchais le mien, qui irait haut devant lui, ainsi que Dieu l'a voulu?...Ma main, prompte à servir ma tête, retire une chevillette de bois. Ma bête hardie, s'élance d'un bond. Ciel! quelles ailes luisantes, toutes neuves! C'est à peine s'il lui est permis de les développer dans la pièce trop exiguë où nous sommes.

(*c*) Les voyages d'Aurèle à Barbizon s'espaçaient de plus en plus, et même, lorsqu'il y revenait, le peintre d'oiseaux semblait mieux se plaire à la ferme que dans l'atelier de son ami. Il avait de longues conférences avec Muguette, et quelquefois, lorsqu'il reprenait le chemin de Fontainebleau, il emportait d'assez volumineux paquets. Arrivé à la ville, il faisait confectionner une boîte de sapin sur laquelle on écrivait *fragile*, et il adressait le colis à Joseph Sèmegrain, devenu son ami et son zélé protecteur. Une après-midi que Maurice luttait contre une boucle rebelle des cheveux de son héros, Muguette, assise près de dame Catherine occupée de son tricot, cessa tout à coup de feuilleter

machinalement un carton rempli de gravures, et poussa une exclamation à la fois joyeuse et admirative.

(*d*) Robert. C'est aujourd'hui la fête de ta femme . . . le vingt-deux avril.

Ratinois. C'est, ma foi, vrai ! je l'avais oublié ! . . .

Robert. En revenant, je passerai par le quai aux fleurs, et j'achèterai un oranger. . .

Ratinois. Oui, votre petite surprise de tous les ans !

Robert. C'est encore ce qu'il y a de mieux.

Ratinois. Vous dinerez avec nous . . . nous n'avons personne !

Robert. Ça va ! . . . Mais pas de cérémonies !

Ratinois. Soyez tranquille ! Ce n'est pas pour vous que nous ferions des façons. Ainsi, à six heures ?

Robert. C'est convenu. Ah ça ! et Frédéric . . . vous ne voulez donc pas le marier, ce garçon-là?

Ratinois. Il y a peut-être quelque chose en train.

Robert. Ah ! quelque chose de bien ?

Ratinois. Oh ! un parti inespéré !

C.

Translate into French :

"I have often wondered what was the use of learning French. I never expect to travel in France, and the French that I attempt to learn, and never succeed in learning, is most certainly not the French of Quebec. Surely it is enough to know one language fairly well, without wasting time in learning a subject which will be of no service afterwards in the battle of life. Yet here am I spending five hours a week throughout the winter at guessing at the meaning of words that I hardly think it worth while to look out in the dictionary. However once I have passed my examination I will do my best to forget all about it. In fact I have little doubt that I shall do so."

Such are the ideas that are often to be found in the average student who refuses to take much of his work seriously.

Translate into English :

(*a*) Son visage sec de médaille.

(*b*) Je ne fais ni une ni deux.

(*c*) Je le lui dirai à sa barbe.

(*d*) Je paye très cher Mario.

(*e*) Saisir à bras-le-corps.

(*f*) Babillard n' écouta de sa vie.

(*g*) Oh ! l' étrange chose que d'avoir affaire à des bêtes !

(*h*) On lavera au fur et à mesure.

PASS.

Senior French.

Dictation.

L'aide de camp reçut avec respect la tasse que lui offrait l'empereur, et ayant fait quelques pas en arrière de la voiture, il heurta presque un soldat de la garde, couché sur un petit exhaussement de neige battue, serrant son fusil dans ses mains convulsives, et portant dans l'énergie de ses traits contractés une expression de souffrance vaincue. Il se pencha vers lui: "Eh bien, mon brave," lui dit-il, "voilà une mauvaise nuit passée; mais enfin nous avons le jour; levons-nous!" Le soldat fit un effort de puissante volonté, et parut cependant comme frappé d'engourdissement sur tous ses muscles tendus et immobiles. "Allons, il faut s'aider un peu," reprit M. de Narbonne, lui présentant le breuvage encore chaud; "prenez ceci; nous en avons d'autres au quartier général." Le soldat hésita, avec une sorte de fierté respectueuse, porta la main à son bonnet de poil noir, puis reçut la tasse, et l'ayant vidée d'un seul trait, il fit un nouveau et rude effort, se souleva, et appuyé sur son fusil, dont la crosse enfonça dans la neige durcie, par une secousse violente, il se redressa de toute sa hauteur, et parut ce qu'il était, un des plus vaillants grenadiers de la garde impériale.

SENIOR PASS.

French.

[Questions 1 and 4 must be tried by all.]

1. Translate into French:

At length he reached the mountains of Strathglass and was compelled to hide in a cavern where some robbers had taken up their abode. These men readily afforded refuge to the wanderer, and recognising the Prince, for whom they had repeatedly ventured their lives, they vowed unalterable devotion to his cause. So with these men Charles Edward remained for about three weeks, and it was with the utmost difficulty they would permit him to leave them. "Stay with us," said the generous robbers, "the mountains of gold which the Government have set upon your head may induce some gentleman to betray you, for he can go to a distant country and live on the price of his dishonour; but to us there exists no temptation. Were we to injure a hair of your head, the very mountains would fall down to crush us to death."

2. Give brief notes on the following: Les Chansons de Geste. La Fontaine. The Naturalist School. The Spirit of the 18th Century. The Leading Characteristics of the Age of Glory. Daudet.

3. How is the word "only" variously rendered in French; explain by examples what considerations would guide your choice.

4. Translate into English:

(*a*) Germain, lui dit un jour son beau-père, il faut pourtant se décider à reprendre femme. Voilà bientôt deux ans que tu es veuf de ma fille, et ton aîné a sept ans. Tu approches de la trentaine, mon garçon, et tu sais que, passé cet âge-là, dans nos pays, un homme est réputé trop vieux pour rentrer en ménage. Tu as trois beaux enfants, et jusqu'ici ils ne nous ont point embarrassés. Ma femme et ma bru les ont soignés de leur mieux, et les ont aimés comme elles le devaient. Voilà Petit-Pierre quasi élevé; il pique déjà les bœufs assez gentiment.

(*b*) Elle franchit sans apparance d'embarras la grande porte d'une seule glace de Saint-Gobain, demanda le rayon de dentelles et s'y

rendit sans témoigner l'émotion qu'elle ressentait intérieurement. Le luxe de tapis, de glaces, d'employés, qui éblouit les nouveaux débarqués, ne lui causait rien que de l'étonnement; son bon sens de Normande qui se sait riche la mettait bien au-dessus de tout ce déploiement de magnificence.

(*c*) PERRICHON, *vivement*. Non, pas vous ! ne parlez pas !....
(*Racontant.*) C'est horrible !....Nous étions sur la mer de Glace ... Le mont Blanc nous regardait tranquille et majestueux....
DANIEL, *à part*. Le récit de Théramène !
MADAME PERRICHON. Mais dépêche-toi donc !
HENRIEVTE. Mon père !
PERRICHON. Un instant, que diable ! Depuis cinq minutes nous suivions, tout pensifs, un sentier abrupte qui serpentait entre deux crevasses....de glace ! Je marchais le premier.
MADAME PERRICHON. Quelle imprudence !
PERRICHON. Tout à coup, j'entends derrière moi comme un éboulement; je me retourne: monsieur venait de disparaître dans un de ces abîmes sans fond, dont la vue seule fait frissoner....

(*d*) LE DOMESTIQUE, *rentrant*. Monsieur Vatel demande à parler à monsieur le marquis.
GASTON. Qu'il entre ! (*Entre Vatel en habit noir.*) Quelle est cette tenue, monsieur Vatel ? êtes-vous d'enterrement, ou la marée manque-t-elle ?
VATEL. Je viens donner ma démission à monsieur le marquis.
GASTON. Votre démission ? la veille d'une bataille !
VATEL. Telle est l'étrange position qui m'est faite; je dois déserter pour ne pas me déshonorer; que monsieur le marquis daigne jeter les yeux sur le menu que m'impose monsieur Poirier.
GASTON. Que vous impose monsieur Poirier ? Voyons cela, (*Lisant.*) Le lapin sauté !

(*e*) Je n'avais pas perdu un mot de tout ce dialogue, et je m'étais contenu jusqu'à la fin, mais quand je vis ce friponneau de gendarme offrir son bras à Mary-Ann pour la dévaliser poliment, je me sentis bouillir, et je marchai droit à lui pour lui dire son fait. Il dut lire dans mes yeux l'exorde de mon discours, car il me lança un regard menaçant, abandonna ces dames sur l'escalier de leur chambre, plaça une sentinelle à la porte, et revint à moi en disant:
"A nous deux !"

5. Give the Primary parts of *recouvrir, convier, taire, croître, assaillir.*

6. A short essay in French on *one* of the following subjects: The War between Japan and Russia. The Character of M. Perrichon. The Plot of "Le Médecin malgré lui."

7. Translate the idioms :

(*a*) Il brûle le pavé.
(*b*) Il n'y a pas de quoi.
(*c*) Va faire tes paquets, animal.
(*d*) Je vous frotterai les oreilles.
(*e*) Entre l'arbre et le doigt il ne faut point mettre l'écorce.
(*f*) En un mot autant qu'en deux mille.
(*g*) Ils m'ont fait médecin malgré mes dents.
(*h*) Un franc animal. Un fou fieffé.

PASS.

Scientific French—Second Year.

Translate:

(*a*) Je me représente un homme comme Aldrovande, ayant une fois conçu le dessein de faire un corps complet d'histoire naturelle; je le vois dans sa bibliothèque lire successivement les anciens, les modernes, les philosophes, les théologiens, les jurisconsultes, les historiens, les voyageurs, les poètes, et lire sans autre but que de saisir tous les mots, toutes les phrases qui, de près ou de loin, ont rapport à son objet; je le vois copier et faire copier toutes ces remarques, et les ranger par lettres alphabétiques; et après avoir rempli plusieurs porte-feuilles de notes de toute espèce, prises souvent sans examen et sans choix, commencer à travailler un sujet particulier, et ne vouloir rien perdre de tout ce qu'il a ramassé; en sorte qu'à l'occasion de l'histoire naturelle du coq ou du bœuf, il vous raconte tout ce qui a jamais été dit des coqs ou des bœufs, tout ce que les anciens en ont pensé, tout ce qu'on a imaginé de leurs vertus, de leur caractère, de leur courage, toutes les choses auxquelles on a voulu les employer, tous les contes que les bonnes femmes en ont faits, tous les miracles qu'on leur a fait faire dans certaines religions, tous les sujets de superstition qu'ils ont fournis, toutes les comparaisons que les poètes en ont tirées, tous les attributs que certains peuples leur ont accordés, toutes les représentations qu'on en fait dans les hiéroglyphes, dans les armoiries, en un mot toutes les histoires et toutes les fables dont on s'est jamais avisé au sujet des coqs ou des bœufs. Qu'on juge après cela de la portion d'histoire naturelle qu'on doit s'attendre à trouver dans ce fatras d'écritures. BUFFON.

(*b*) Les trois prétendants étaient assis à une table chargée de vins et de viandes, qui étaient là en permanence pour eux toute la matinée du dimanche; car le père Léonard aimait à faire montre de sa richesse, et la veuve n'était pas fâchée non plus d'étaler sa belle vaisselle, et de tenir table comme une rentière Germain, tout simple et confiant qu'il était observa les choses avec assez de pénétration, et pour la première fois de sa vie il se tint sur la défensive en trinquant. Le père Léonard l'avait forcé de prendre place avec ses rivaux, et, s'asseyant lui-même vis-à-vis de lui, il le traitait de son mieux, et s'occupait de lui avec prédilection. Le cadeau de gibier, malgré la brèche que Germain y avait faite pour son propre compte, était encore assez copieux pour produire de l'effet. La veuve y parut sensible, et les prétendants y jetèrent un coup d'œil de dédain.

(*c*) PERRICHON. Vous allez voir que je suis tombé du jury! *(Lisant.)* "On nous écrit de Chamouny . . .

TOUS. Tiens! *(Ils se rapprochent.)*

PERRICHON, *lisant.* "Un événement qui aurait pu avoir des suites déplorables vient d'arriver à la mer de Glace . . . M. Daniel S. . . a fait un faux pas et a disparu dans une de ces crevasses si redoutées des voyageurs. Un des témoins de cette scène, M. Perrichon (qu'il nous permette de le nommer.)" *(Parlé.)* Comment donc! si je le permets! *(Lisant.)* "M. Perrichon, notable commerçant de Paris et père de famille, n'écoutant que son courage, et au mépris de sa propre vie, s'est élancé dans le gouffre," *(Parlé.)* C'est vrai! "et après des efforts inouïs, a été assez heureux pour en retirer son compagnon. Un si admirable dévouement n'a été surpassé que par la modestie de M. Perrichon, qui s'est dérobé aux félicitations de la foule émue et attendrie . . . Les gens de cœur de tous les pays nous sauront gré de leur signaler un pareil trait!"

PASS.

Scientific French—Third Year.

Translate into English :

(*a*) Puis aussi on connaît de là que le vrai usage de la respiration est d'apporter assez d'air frais dans le poumon pour faire que le sang qui y vient de la concavité droite du cœur, où il a été raréfié et comme changé en vapeurs, s'y épaississe et convertisse en sang derechef, avant que de retomber dans la gauche, sans quoi il ne pourrait être propre à servir de nourriture au feu qui y est; ce qui se confirme parce qu'on voit que les animaux qui n'ont point de poumons n'ont aussi qu'une seule concavité dans le cœur, et que les enfants, qui n'en peuvent user pendant qu'ils sont renfermés au ventre de leurs mères, ont une ouverture par où il coule du sang de la veine cave en la concavité gauche du cœur et un conduit par où il en vient de la veine artérieuse en la grande artère sans passer par le poumon. Puis la coction, comment se ferait-elle en l'estomac si le cœur n'y envoyait de la chaleur par les artères, et avec cela quelques-unes des plus coulantes parties du sang qui aident à dissoudre les viandes qu'on y a mises? et l'action qui converit le suc de ces viandes en sang n'est-elle pas aisée à connaître si on considère qu'il se distille en passant et repassant par le cœur peut-être plus de cent ou deux cents fois en chaque jour ? DESCARTES.

(*b*) Ce principe, tout en facilitant les recherches, donnait au résultat final une portée considérable, puisque, vraisemblablement, le sérum d'un animal immunisé au moyen d'un venin donné serait efficace contre celui de n'importe quel serpent. Le Dr. Calmette trancha la question en faisant un mélange de toutes les diverses glandes venimeuses de sa collection et se mit en devoir de "mithridatiser" une série d'animaux.

Cette partie des recherches fut longue et laborieuse. Les lapins, comme les chevaux, avaient le mauvais goût de maigrir.... souvent même d'une façon définitive. Ce ne fut qu'après des déboires et des tâtonnements multiples que le savant bactériologiste parvint enfin à son but, en laissant ses sujets se reposer deux ou trois jours entre chaque inoculation. Il put alors présenter un lapin qui, après avoir été traité de la sorte une année, supportait impunément l'énorme dose de venin capable de tuer quarante lapins de même poids. Il en fut de même avec un âne et deux chevaux.

(*c*) Quoique les éléments du système des planètes soient arbitraires, cependant ils ont entre eux des rapports qui peuvent nous

éclairer sur son origine. En le considérant avec attention, on est étonné de voir toutes les planètes se mouvoir autour du Soleil, d'occident en orient, et presque dans un même plan; les satellites en mouvement autour de leurs planètes, dans le même sens et à peu près dans le même plan que les planètes; enfin, le Soleil, les planètes et les satellites dont on a observé les mouvements de rotation, tourner sur eux-mêmes, dans le sens et à peu près dans le plan de leurs mouvements de projection. Les satellites offrent à cet égard une singularité remarquable. Leur mouvement de rotation est exactement égal à leur mouvement de révolution, en sorte qu'ils présentent constamment le même hémisphère à leur planète. C'est, du moins, ce que l'on observe pour la Lune, pour les quatre satellites de Jupiter et pour le dernier satellite de Saturne, les seuls satellites dont on ait reconnu jusqu'ici la rotation.

LAPLACE.

PASS.

Scientific French—Fourth Year.

Translate into English:

(*a*) La doctrine que nous venons d'exposer touchant le rapport qui existe entre la grandeur fonctionnelle des cellules et le nombre de leurs collatérales pourra peut-être expliquer deux faits très difficiles à interpréter dans l'hypothèse, acceptée généralement, du rapport de l'intelligence avec le nombre des cellules cérébrales, celles-ci représentant un simple instrument de l'âme, ou étant considerés comme une condition exclusive de l'activité psychique. Ces faits sont: le remarquable accroissement intellectuel qui s'observe chez les hommes consacrés à un exercice mental profond et continu, et la co-existence d'un talent de marque, et même d'un véritable génie avec des cerveaux de volume moyen ou inférieurs à la dimension et au poids normaux. Dans le premier cas, on pourrait supposer que la gymnastique cérébrale, puisqu 'elle ne peut produire des cellules nouvelles (les cellules nerveuses ne se multiplient pas comme les cellules muscularies) porte un peu plus loin que d'ordinaire le développemont des expansions protoplasmiques et des collaterales nerveuses, en forçant l'établissement des connexions intercorticales nouvelles et plus étendues.

(*b*) Ce n'est pas tout. Lenhossék a encore démontré que chez certains poissons on observe à côté des cellules bi-polaires, d'autres corpuscles, qui sont de véritables éléments uni-polaires. On voit donc que la transition de la bipolarité à l'unipolarité commence déjà chez certains poissons adultes. Il résulte de tous ces travaux que toute cellule sensitive on sensorielle *est* un corpuscle bipolaire ou *l'a été*, à l'époque embryonnaire. Toute cellule sensitive ou sensorielle est donc *toujours* pourvue de deux expansions: l'une périphérique, destinée à recueillir les excitations centripètes produites à la surface du corps, et l'autre centrale, généralement plus ténue ayant pour charge de conduire à un centre nerveux l'excitation recueillie par la première.

(*c*) Ainsi, comme je l'ai dit ailleurs, si les intestins d'un animal sont organisés de manière à ne digérer que de la chair récente, il faut aussi que ses mâchoires soient construites pour dévorer une proie; ses griffes pour la saiser et la déchirer; ses dents pour la couper et la diviser; le système entier de ses organes du mouvement pour la poursuivre et pour l'atteindre; ses organes des sens pour l'apercevoir de loin; il faut même que la nature ait placé dans son cerveau l'instinct nécessaire pour savoir se cacher et tendre des

pièges à ses victimes. Telles seront les conditions générales du régime carnivore; tout animal destiné pour ce régime les réunira infailliblement, car sa race n'aurait pu subsister sans elles; mais sous ces conditions générales il en existe de particulières, relatives à la grandeur, à l'espèce, au séjour de la proie pour laquelle l'animal est disposé; et de chacune de ces conditions particulières résultent des modifications de détail dans les formes qui dérivent des conditions générales: ainsi, non seulement la classe, mais l'ordre, mais le genre, et jusqu'à l'espèce, se trouvent exprimés dans la forme de chaque partie.

En effet,... pour que l'animal puisse emporter sa proie, il lui faut une certaine vigueur dans les muscles qui soulèvent sa tête, d'où résulte une forme déterminée dans les vertèbres où ces muscles ont leurs attaches, et dans l'occiput où ils s'insèrent.

Pour que les dents puissent couper la chair, il faut qu'elles soient tranchantes, et qu'elles le soient plus ou moins, selon qu'elles auront plus ou moins exclusivement de la chair à couper. Leur base devra être d'autant plus solide qu'elles auront plus d'os, et de plus gros os à briser. Toutes ces circonstances influeront aussi sur le développement de toutes les parties qui servent à mouvoir la mâchoire.

Junior English.

I.

[Two questions in this section. No. 1 is compulsory.]

Times grew worse and worse with Rip Van Winkle, as years of matrimony rolled on: a tart temper never mellows with age, and a sharp tongue is the only edge tool that grows keener with constant use. For a long while he used to console himself, when driven from home, by frequenting a kind of perpetual club of the sages, philosophers and other idle personages of the village, which held its sessions on a bench before a small inn, designated by a rubicund portrait of his majesty, George the Third. Here they used to sit in the shade of a long lazy summer's day, talking listlessly over village gossip, or telling endless sleepy stories about nothing. But it would have been worth any statesman's money to have heard the profound discussions which sometimes took place, when by chance an old newspaper fell into their hands from some passing traveller. How solemnly they would listen to the contents, as drawled out by Derrick Van Bummel, the schoolmaster, a dapper learned little man, who was not to be daunted by the most gigantic word in the dictionary; and how sagely they would deliberate on public events some months after they had taken place.

The opinions of this junto were completely controlled by Nicholas Vedder, a patriarch of the village, and landlord of the inn, at the door of which he took his seat from morning till night, just moving sufficiently to avoid the sun, and keep in the shade of a large tree; so that the neighbours could tell the hour by his movements as accurately as by a sun-dial. It is true, he was rarely heard to speak, but smoked his pipe incessantly. His adherents, however, (for every great man has his adherents,) perfectly understood him, and knew how to gather his opinions. When anything that was read or related displeased him, he was observed to smoke his pipe vehemently, and to send forth short, frequent, and angry puffs; but when pleased, he would inhale the smoke slowly and tranquilly, and emit it in light and placid clouds, and sometimes taking the pipe from his mouth and letting the fragrant vapor curl about his nose, would gravely nod his head in token of perfect approbation.

1. Illustrate from this tale the qualities of thought possessed by the author, treating them under the heads of Reflective Power, Power of Observation, Humour, etc.

2. Characterize the style of the above passage. Compare it with Addison's.

3. Define the Periodic, the Balanced and the Loose Structure, with examples. In what kinds of writing or for what end may each be used with particular advantage? What are the ordinary functions of the short sentence? How does Macaulay use it? What are the essentials of the Discrete or Modern Platform style?

4. (*a*) Define the faults of style or idiom in the following sentences and amend them:

The evidence on which this charge rests is, to say the least, precarious.

Mr. R. has always promoted the proposition for a coalition.

The invertebrate character of the man is evident from the foolish concessions he is ready to make to public opinion.

The style of Gibson's sculpture swayed to exaggeration in the direction of what was ideal.

(*b*) Define, with examples from any of the passages quoted in this paper, Precision, Force, Beauty in respect of style. What is meant by Purity in Vocabulary?

II.

[Any three questions in this section.]

5. It must be by his death: and for my part,
I know no personal cause to spurn at him,
But for the general. He *would* be crown'd:
How that might change his nature, there's the question.
It is the bright day that brings forth the adder;
And that craves wary walking. Crown him?—that;—
And then I grant we put a sting in him,
That at his will he may do danger with.
The *abuse* of greatness is when it disjoins
Remorse from power: and to speak truth of Cæsar
I have not known when his *affections* sway'd
More than his reason. But 'tis a common *proof*
That *lowliness* is young ambition's ladder,
Whereto the climber upward turns his face;
But when he once attains the upmost round
He then unto the ladder turns his back,
Looks in the clouds, scorning the base degrees
By which he did ascend. So Cæsar may;
Then, lest he may, *prevent*. And since the quarrel
Will bear no colour for the thing he is,
Fashion it thus; that what he is, augmented,

Would run to these and these *extremities:*
And therefore think him as a serpent's egg
Which, hatched, would as his kind grow *mischievous,*
And kill him in the shell.

(*a*) At what point in the play does this speech occur? Who is the speaker and what impression of his character does the speech convey?

(*b*) Mark the scansion of lines 12-18. Explain the figurative language in lines 7-8; 13-18; 19-20, and 23-25.

(*c*) Give the meaning of the italicized words in the extract.

6. Describe the character of Marc Antony, quoting or giving references in support of your judgments.

7. Tell where the following passages occur and explain their meaning:

(*a*) O hateful error, melancholy's child,
Why dost thou show to the apt thoughts of men
The things that are not?

(*b*) You know that I held Epicurus strong,
And his opinion: now I change my mind
And partly credit things that do presage.

(*c*) Of your philosophy you make no use
If you give place to accidental evils.

(*d*) In such a time as this it is not meet
That every nice offence should bear his comment.

(*e*) These couchings and these lowly courtesies
Might fire the blood of ordinary men
And turn preordinance and first decree
Into the law of children.

8. Give an account of the quarrel and reconciliation at Sardis. Show what light the scene throws on the characters of Brutus and Cassius.

III.

[Any two questions in this section.]

9. The crows we have always with us, but it is not every day or every season that one sees an eagle. Hence I must preserve the memory of one I saw the last day I went bee-hunting. As I was

labouring up the side of a mountain at the head of a valley the noble bird sprang from the top of a dry tree above me and came sailing directly over my head. I saw him bend his eye down upon me and I could hear the low hum of his plumage as if the web of every quill in his great wings vibrated in his strong level flight. I watched him as long as my eye could hold him. When he was fairly clear of the mountain he began that sweeping spiral movement in which he climbs the sky. Up and up he went without once breaking his majestic poise till he appeared to sight some far-off alien geography when he bent his course thitherward and vanished in the blue depths.

Illustrate from the above extract the peculiar quality of Burroughs' observation of nature. Characterize also the style of the passage.

10. Regard gradation lest the soul
Of discord race the rising wind;
A wind to puff your idol fires
And heap their ashes on the head,
To shame the boast so often made
That we are wiser than our sires.

Give in your own words the poet's meaning here. How does it represent his general attitude to the social and political movements of his time?

11. Give an adequate account of either The Lord of Burleigh or The Lady of Shalott. What characteristics of Tennyson's work do they exhibit?

Senior English.

I.

[*Two* questions in this section, No. 1 being compulsory.]

'Tis not the *balm* the sceptre and the *ball*,
The sword, the mace, the crown imperial,
The intertissued robe of gold and pearl,
The *farced title running 'fore the king*,
The throne he sits on, nor the tide of pomp
That beats upon the high shore of this world,
No, not all these, thrice gorgeus ceremony,
Not all these, laid in bed majestical,
Can sleep so soundly as the *wretched* slave,
Who with a body filled and *vacant* mind
Gets him to rest, cramm'd with *distressful* bread;
Never sees *horrid* night, the child of hell,
But, like a lackey, from the rise to set
Sweats in the eye of Phœbus and all night
Sleeps in Elysium; next day after dawn,
Doth rise and *help Hyperion to his horse*,
And follows so the ever running year.
With profitable labour to his grave:
And but for ceremony, such a wretch
Winding up days with toil and nights with sleep
Had the *forehand* and *vantage* of a king.
The slave a *member of the country's peace*
Enjoys it; but in gross brain little wots
What watch the king keeps to maintain the peace
Whose hours the peasant best advantages.

(*a*) Explain the italicized words and phrases.

(*b*) Characterize the diction of the passage, illustrating your remarks by specific references.

(*c*) Describe the rhythm of the passage, pointing out what is characteristic in Shakespeare's management of accents, pauses, obtrusive quantity, run on lines, and pitch.

2. (*a*) The play of Henry V. is sometimes described as epic rather than dramatic. What is meant?

(*b*) Give a brief estimate of Fluellen.

3. (*a*) How does Milton's conception of Beelzebub differ from his conception of Satan ?

(*b*) Explain the following extracts :

> the least erected spirit that fell
> From heaven
> or on the Delphian cliff
> Or in Dodona
> Begirt with British and Armoric knights.

(*c*) Characterize Milton's blank verse.

II.

[Any two questions in this section.]

4. What are the characteristics of the Ancient Ballad ? Give some account of modern Ballad poetry, noticing the work of Lewis, Scott, Wordsworth.

5. Unnumber'd suppliants crowd Preferment's gate,
Athirst for wealth, and burning to be great;
Delusive Fortune hears th' incessant call:
They mount, they shine, evaporate, and fall.
On ev'ry stage the foes of peace atteud;
Hate dogs their flight, and insult mocks their end;
Love ends with hope; the sinking statesman's door
Pours in the morning worshipper no more;
For growing names the weekly scribbler lies,
To growing wealth the dedicator flies;

(*a*) Describe and illustrate from the above passage the general and technical qualities of Johnson's versification. How does that of Goldsmith differ ?

(*b*) Give a list of Dr. Johnson's Works. Describe his intellectual qualities as revealed in Boswell's biography of him and in *The Vanity of Human Wishes.*

6. Give a brief account of any four of the following works : *Beowulf, Absalom and Achitophel, Song at the Feast of Brougham Castle, A Toccata of Galuppi's, Ruskin's Geneva.*

III.

[Any two questions in this section.]

7. King Harald sat glad ynou · at Euerwik atte mete,
So *th*at *ther* com a messenger · ar he adde izete,

& sede, *th*at duc William · to Hastinges was icome,
& is bane*r* adde arerd . & *th*e contreie al inome.
Harald anon, mid grete he*r*te · corageous ynou,
As he of nomon ne tolde · *th*ude*r*ward uaste he drou.
He ne let nozt clupie al is folc · so willesfol he was,
& al for in *th*e o*ther* bataile · him vel so vair cas.
*Th*o duc William wuste · *th*at he was income so nei,
A monek he sende him in message · & dude as *th*e sley,
*Th*at lond, *th*at him was iziue · *th*at he ssolde him vp-zelde,
O*ther* come, & dereyni *th*e rizte · mid suerd in *th*e velde.

(*a*) Turn into modern English.

(*b*) Underline the words of French origin in the extract. Estimate the comparative value of the native and foreign elements in Robert of Gloucester's language.

8. Explain with illustrations what is meant by Latin of the 4th Period. Note the causes of its introduction at various periods and discuss its importance as an element in style.

9. Give six examples of English borrowings from French in the 17th and 18th centuries. Represent their pronunciation phonetically and comment on it in each case.

10. Classify the following words as to their origin and show what light they throw on the history and tendencies of the English language: *Victual, reason, minster, squire, brunette, damsel, battle, debt, pauciloquy, fraicheur, mirage.*

IV.

[Any one of the following questions.]

11. What are the qualities of Matthew Arnold as a critic? Characterize his style.

12. Compare the Rhymed couplet as managed by Chaucer, Dryden, Pope, Goldsmith, Keats.

13. Compare Macaulay and Charles Lamb in respect of (1) qualities of thought, (2) qualities of style.

PASS.

Mediaeval History.

1. What was the condition of landed property under the later Empire? Explain Usucapio and Emphyteusis. What were the terms of Usucapio established by Justiman?

2. Give an account of the judicial system introduced by Charlemagne.

3. Explain the system of Benefices and of Allodial lands, and the origin of Feudalism.

4. In the establishing of the Holy Roman Empire what were the relations of the Emperor with the Pope?

5. Explain briefly the rise of the Communes in France. In what form did the crown encroach on their privileges?

6. Trace the development of the Grand Conseil and the Parliament of Paris.

7. What were the propositions of this States General which met at Pontoise in 1561 in regard to the property of the Church?

8. Describe the French Directorate of 1795.

PASS.

English Constitutional History.

1. State the location of the Jutes, the Angles and the Saxons in England. Show any effects of these distinct settlements on the future history of England.

2. Trace the system of representation in the several Anglo-Saxon Courts.

3. State the respective claims of Harold and William of Normandy to the English throne; and later of Stephen and Henry of Anjon.

4. In the reigns of William I. and William II. the Norman Barons in England rebelled. What was their object? On what forces were the Kings obliged to rely in overcoming the rebellions?

5. According to the Constitutions of Clarendon how were clerics accused of any crime to be dealt with?

6. What was the character and what the functions of the Jury of Presentment as established by the Assize of of Clarendon?

7. The Magna Charta shows a very liberal spirit. Illustrate this.

8. Explain the responsibility of Ministers. Compare in this respect Cabinet Government in the United States with Cabinet Government in England.

9. State the main features of the Canadian Constitutional Act of 1791.

Mental Philosophy.

Intra-Mural.

[Any 7 questions are a full paper.]

1. Give an outline of Plato's Theaetetus.

2. Analyze "experience."

3. Distinguish philosophy and science.

4. Criticize the doctrine that all opinions are true, and write a brief account of its authors.

5. Is knowledge virtue? Give reasons for your answer.

6. What is meant by freedom? How would you uphold the freedom of the will against the argument that man is limited in many ways?

7. Discuss the elements contained in an act.

8. State, explain and consider Aristotle's doctrine of happiness.

9. What is the Greek view of art? What are its defects and merits? Give a more adequate theory of beauty.

10. Justify the use of the ideas "higher" and "lower" in philosophy. In what ways are these ideas applicable to religion?

Mental Philosophy.

Extra-Mural.

[Six questions are a full paper. Of these at least two must be taken from A and two from B.]

A.

1. (*a*) Discuss the value, to Greek life and thought, of the Sophistic doctrine that each man must be the measure of his own truth and reality.

(*b*) What were the immediate effects of this doctrine upon the Greek state and religion?

2. How does Plato criticise the Protagorean doctrine that each man's opinions are for him true?

3. What, according to Aristotle, is the supreme end of life? Compare his view with that of the Stoics.

4. "Aristotle's system of moral and intellectual virtues follows naturally from his conception of the nature of the soul." Expand and interpret this statement, giving illustrations from the "Ethics."

5. What is Aristotle's view of the relation between desire and reason? Do you consider it satisfactory? Give your own view.

B.

6. "I think therefore I exist. . . . I am, therefore, precisely speaking, only a thinking thing, that is a thing that doubts, understands, affirms, denies, wills, refuses, that imagines also and perceives." (*a*) How does Descartes arrive at this conception of his own existence and nature? (*b*) How does he subsequently prove the existence of material things?

7. Outline briefly (*a*) Descartes' proof of the existence of God, and (*b*) his conception of truth and error and their relation to each other.

8. "From what has been said it is evident that there is not any other substance than Spirit or *that which perceives*. . . . The very notion of what is called Matter or *corporeal substances* involves a contradiction in it." Explain fully these quotations from Berkeley.

9. "This thorough-going subjective idealism, this complete denial of matter, Berkeley considered as the surest way to oppose materialism and atheism." Explain.

Moral Philosophy.

[Only six questions are to be done.]

1. State the steps by which Hume reduces causal connection to "custom." How does Kant reply?

2. Criticise Mill's definition of "cause" as an "invariable antecedent," pointing out (*a*) the element of truth in it, (*b*) its defects.

3. Can knowledge or morality be explained on the basis of natural evolution? Give reasons for your answer.

4. Give a short account of the philosophy of the Stoics and the Epicureans. What is the main defect in the ethical theory of each?

5. "A man saves another from drowning in order to receive a reward." How would the moral value of the act be estimated by (*a*) the egoistic hedonist, (*b*) the utilitarian, (*c*) Kant. What is your own view?

6. Why does Kant reject the *theoretical* proofs for the existence of God? State and criticise his *ethical* proof.

7. How does Kant reconcile the doctrine of "original sin" with his philosophy? Compare his view with that of St. Paul.

8. "Aesthetic judgments are (*a*) disinterested (*b*) universal, (*c*) based on feeling." Explain this statement of Kant and give his distinction between the beautiful and the sublime.

9. Discuss the problem of political liberty.

Economics.

Intra-Mural.

1. Explain what is involved in the production of wealth. Give illustrations of the production of material and immaterial wealth.

2. How does production on a large scale affect the economic opportunities of the individual?

3. Compare the Canadian and American banking systems in point of (*a*) security of note issue; (*b*) capacity to provide for the "moving of the crops"; (*c*) economy of reserve funds.

4. When goods are imported in the face of a protective tariff, who pays the duty?

5. Discuss the idea held by some workmen, that the less work they do in the present, the more there will be for them to do in the future.

6. Discuss the legitimacy of interest. Why has the taking of interest been considered wrong?

Economics.

Extra-Mural.

[Only six questions to be answered.]

1. To what was due the development of British trade and industry during the Elizabethian period? How was it affected by the policy of the Government?

2. What connection was there between the rise of the factory system and the growth of pauperism and other social evils of the period?

3. "Man produces and consumes only utilities." Explain, and show how this determines the character of economic laws.

4. On what physical conditions does the law of diminishing returns depend? In what respects does its practical application in Canada differ from that in Britain?

5. How does production on a large scale affect the economic opportunities of the individual?

6. Explain the function of the clearing-house and show its relation to the trade of a country.

7. Discuss the legitimacy of interest. Why has the taking of interest been considered wrong?

Political Science.

POLITICS.

Intra-Mural.

1. In what shape do any aspects of Aristotle's conception of the relations of the master to the household, including the slaves, exist in modern society?

2. Examine Aristotle's treatment of the advantages and disadvantages of the rule of the few and of the many.

3. Contrast the temporary and the permanent features in Machiavelli's conception of the successful ruler.

4. What is involved in Machiavelli's recognition of a standard of what ought to be, in politics, which, nevertheless, it is not always wise to respect?

5. What is the function of the "law of reason" in Locke's theory of the state?

6. How are equality and inequality harmonized in modern society?

Political Science.

Extra-Mural.

[Only six questions to be answered.]

1. How does Aristotle connect the naturalness of the state with the full development of man?

2. To what extent was Aristotle justified in holding that, under the conditions of the time, the realization of political freedom was possible only for a limited number of citizens?

3. Discuss Aristotle's conception of the necessary relation of education to what he considered the best form of the state.

4. Why was it necessary for Rousseau to maintain that in entering society the individual must still remain as free as before?

5. Bring out the elements of truth and error in Rousseau's position that the general will is always right; but the people are sometimes wrong.

6. Discuss Leroy Beaulieu's distinction between society and the state.

7. When there is a conflict between individual rights and state rights, on what principles can we determine which should prevail?

Junior Mathematics.

[Fifteen % at least must be made upon each section of this paper, and 40 % on the whole.]

A.

1. If $2s=a+b+c$ show that $s(s-a)(b+c)+a(s-b)(s-c)-2bcs\equiv s(s-b)(c+a)+b(s-c)(s-a)-2cas$; and write a third identical expression.

2. (*a*) Factorize (i) $x^4+8x^3-10x^2-104x+105$. (ii) x^3-1. (iii) $2\Sigma a^2b^2-\Sigma a^4$.

(*b*) If ω be a cube root of 1 show that $(1+\omega-\omega^2)^2=4\omega$.

3. (*a*) Express $(1+x-x^2)/(1-x+x^2)$ as a series in powers of x to x^6.

(*b*) Find the division which gives the series

$$1-x^2+x^3-x^5+x^6-x^7+\ldots$$

4. (*a*) Draw the graph of x^2-6x+2 and from it explain what is meant by a minimum solution.

(*b*) Along a road already fenced a rectangular plot of 100 square rods is to be laid out so as to cost the least for fencing the other three sides. Find its form.

5. (*a*) Prove the formula $S=\frac{1}{2}n(2a+\overline{n-1}.d)$ for an A.P.

(*b*) Show that $1+3+5+7+\ldots$ to n terms is n^2.

6. Derive the binomial theorem from the continued product of $(x+a)(x+b)(x+c)\ldots$ to n factors.

B.

7. (*a*) Write down all the cases of congruence of triangles.

(*b*) By means of a figure show that there may be two

triangles formed when two sides and the angle opposite the shorter one are given.

8. (*a*) L, M, and N are three parallel lines, and M is midway between L and N. Show that they intercept equal segments on any transversal.

(*b*) Show that the join of the mid points of the non-parallel sides of a trapezoid is equal to half the sum of the parallel sides; and apply it to the case of the triangle.

9. (*a*) The angle ACB stands on the arc AB in a circle. Prove that the angle is constant as C moves in the circumference. (*b*) What theorems can you deduce from (*a*) when C moves to (i) A, and (ii) a point in the arc AB?

10. (*a*) Prove the formula $a^2 = b^2 + c^2 - 2bc_1$ for triangles; and explain, from continuity, when it may take the forms $a^2 = b^2 + c^2$ and $a^2 = b^2 + c^2 + 2bc_1$.

(*b*) Show that in any triangle $a^2 + b^2 = \frac{1}{2}c^2 + 2m^2$, where m is the median from C.

11. Find, in terms of the sides, the distances from the vertices of a triangle to the points of contact of the incircle.

Senior Mathematics.

[At least 15 per cent. must be made on each section, and 40 per cent. on the whole.]

A.

1. (*a*) Find the relation existing between a, n, d, S in an A.P., and a. n, r, S in a G.P.

(*b*) Find the sum of all the multiples of 3 lying between 100 and 200.

2. (*a*) Write in Σ notation the expansion of $(x+a)(x+b)(x+c)\ldots$to n factors.

(*b*) From (*a*) deduce the expansion of $(x+a)^n$.

3. Obtain a vulgar fraction, with 3 figures in each part, which shall be a near approximation to 3·1415926.

4. Sum to n terms the series $1\cdot3+2\cdot4+3\cdot5+\ldots$.

B.

5. (*a*) Describe a square equal to a given rectangle.

(*b*) Construct a circle to pass through two given points and touch a given line.

6. (*a*) Prove that the homologous sides of similar triangles are proportional.

(*b*) The rectangle on any two sides of a triangle is equal to that on the altitude to the third side and the circumdiameter of the triangle.

7. (*a*) Given a 3-faced corner, show that there is another 3-faced corner whose face angles are related to the dihedral angles of the former, and reciprocally.

b. Find the relation between the angles in (*a*).

8. Explain the formula $\frac{1}{6}h\,(B+B'+4M)$ and apply it to find the volume of a frustum of a cone.

9. (*a*) Work out the relation between a radian and a degree.

(*b*) The moon's angular diameter is 31′ and she is 240,000 miles distant. Find her diameter in miles.

10. (*a*) Develope the cosine formula, and the sine formula.

(*b*) A post 20 feet long leans to the east at an angle of 15° with the vertical. Find the length of the shadow on level ground when the sun is south at an elevation of 60°.

11. (*a*) Write the addition theorems for sine and cosine and prove any one of them.

(*b*) Thence show that $\tan\frac{1}{2}\theta=(1-\cos\theta)/\sin\theta$; and $\tan^2\frac{1}{2}\theta=(1-\cos\theta)/(1+\cos\theta)$.

Junior Physics.

[Candidates will take section A and *either* section B *or* section C.]

A

1. A body is projected vertically upwards with a speed of 73·5 metres per second. Taking $g=980$, how far will it rise? What will its speed be at a height of 176·4 metres? How far will it travel in the 8th second, and in the first 15 seconds of its motion?

2. Explain Foucault's method of proving the Earth's rotation from west to east.

3. Enunciate the Conservation of Momentum. A and B are at rest on smooth ice, when A throws a ball of mass m with speed v toward B who catches the ball. If the masses of A and B be M and M', find the subsequent motions of A and B.

4. Express in gravitation-measure forces of a poundal and a kilodyne. A kilogram-weight acts upon a hectogram, find the speed after going a hectometre, $g=980$.

5. Prove that when a body floats in a liquid, the volume immersed is to the whole volume as the specific weight of the body is to the specific weight of the liquid. Hence compare the volume of an iceberg (s.w. 0·92) below the surface of the sea (s.w. 1·027) with that above.

6. Given the relative velocities of two bodies P and Q, and the velocity of P relatively to the Earth, show how to find the velocity of Q. To a person travelling eastwards with a speed of 4 kilometres per hour, the wind seems to be north; on doubling his speed, it seems to be north-east. Find the velocity of the wind.

7. (*a*) Write the equation connecting the pressure, volume and temperature of a gas.

(*b*) If the density of air at 0° and 76 cm. is 0·00129, calculate the pressure at which 1 cubic metre of air at 50° would weigh 2 kilograms.

8. (*a*) Describe a method of measuring the pressure of water vapour at various temperatures.

(*b*) How is the humidity of the atmosphere measured?

9. (*a*) Why is it necessary to make all electrostatic apparatus quite dry before experimenting?

(*b*) A needle is held in the fingers so that its point is a few millimetres from the surface of a highly charged conductor. It is found that the conductor is largely discharged without any visible spark. What explanation of this fact can you offer? What uses are made of the principle involved?

B

10. (*a*) Describe the construction of an accumulator cell (storage cell).

(*b*) Describe its action when in use.

(*c*) What are the important features of a storage battery?

11. (*a*) Describe an electromagnetic voltmeter.

(*b*) How does it differ from an amperemeter of the same type in the construction and arrangement of its parts?

(*c*) A current is flowing through an incandescent lamp. Show by a diagram how you would connect instruments to find the current flowing and the potential difference between the terminals of the lamp.

12. Write short notes on (*a*) overtones, (*b*) tempered scale, (*c*) stationary waves.

13. What is meant by total reflection? What is the critical angle? Show how to use a right angled glass

prism (1) to deflect a beam of light through a right angle, (2) to invert a beam without changing its direction.

14. Describe the phenomenon of double refraction. What difference is there between the two parts into which a beam of light is divided by double refraction? Describe a Nicol prism.

C

15. Describe Torricelli's experiment whereby he first measured the pressure of the atmosphere. State in gravitation and absolute measure the mean, sea level, atmospheric pressure over the earth's surface.

16. What is the principal component in any direction of a force? Prove that the algebraical sum of the principal components in any direction of two forces is equal to the principal component in the same direction of their resultant.

17. Calculate how many cubic feet of air would be cooled through 1° in just melting a cubic foot of ice at −10°. Given s.w. of air=0·0012, s.h. of air=0·238, s.w. of ice=0·92, s.h. of ice=0·50, l.h. of water at 0°=79.

18. How is the electrostatic potential of a body defined? How may the potential of a body be altered without altering its charge? Account for the large capacity of Leyden jars.

19. How is the earth's magnetic field represented on maps? Distinguish between isoclinic and isogonic lines and describe their general direction.

Senior Physics.

[N.B.—Only 16 questions to be answered.]

1. A train of 250 tons is drawn by a locomotive of 300 H.P. If 45 miles per hour be full speed, find the resistance per ton. Find also the distance the train would go after steam is shut off, if 8 pounds weight per ton be the average resistance.

2. Define a dimensional equation, and express the unit of pressure-intensity in terms of the fundamental units. If a metre, kilogram, and $\frac{1}{200000}$ mean solar day were the fundamental units, what number would express the mean atmospheric pressure, which is 1·014 megabarad.

3. A body is projected up a rough inclined plane. Find expressions for (1) the time taken to rise, (2) the greatest height reached, (3) the time taken to return to the point of projection, (4) the speed on returning to the point of projection. What becomes of the molar energy lost?

4. At what rate can an engine of 300 H.P. draw a train of 250 tons up an incline of 1 in 250, the resistance from friction being 10 pounds-weight per ton?

5. A wire is wrapped round a smooth regular 6 sided prism and pulled with a tension of 50 kilograms-weight; find the total crushing force. Find also the total pressure and the pressure per centimetre on a smooth circular hoop (diameter 80 cm.) in like circumstances.

6. If a body is dragged up a rough inclined plane by a force acting along the plane, show that the work done is the same as in dragging it by a horizontal force along the base supposed to be of the same material as the plane itself, and then raising it vertically through the height of the plane.

7. A body of 10 kilograms hanging vertically is connected by a cord with a body of 12 kilograms on a rough horizontal table, coefficient of friction $\frac{1}{4}$. Find the tension of the cord and the motion of the centre of mass.

8. Show how to arrange a voltaic battery of 24 cells so as to give the greatest current, the resistance of 1 cell being $\frac{1}{2}$ ohm, and the external resistance 3 ohms. If the e.m.f. of 1 cell be 1 volt, find the current in amperes.

9. State the relation between the poles and the direction of the current in an electromagnet. State 3 good applications of electromagnets.

10. Give the construction of, and explain the action of a telephone.

11. Describe the construction of a thermopile. What is the principal use of a thermopile?

12. Explain how Foucault measured the speed of light by experiment.

13. Explain why a white-washed cottage appears nearly equally bright in clear weather at all distances.

14. Describe and explain the appearance of the moon in a total lunar eclipse. How and when is it possible to see the sun and totally eclipsed moon simultaneously?

15. Prove geometrically that in the refraction of light both the angles of refraction and deviation increase with the angle of incidence.

16. How can you illustrate experimentally the reflection and refraction of waves?

17. What is resonance? How can you experimentally find from resonance the wave-length of a note?

18. Define the 3 properties of a musical note. How would you represent them graphically ?

19. What are musical intervals? How are they measured? Name and give the numerical measure of 3 of the principal musical intervals.

Junior Botany.

FIRST PAPER.

1. Make a list of the species of plants contained in the bundle submitted in the following form :

No.	Order.	Genus.	Species.

2. Select from the bundle one specimen belonging to each of the following orders, and describe it as accurately as you can under the following heads : (1) Root, (2) Stem, (3) Leaves, (4) Flowers, (5) Fruit.

1. Cruciferae.
2. Leguminosae.
3. Ericaceae.
4. Liliaceae.

PASS.

Botany.

SECOND PAPER.

1. Explain the difference between Monocotyledons and Dicotyledons. Give examples of each.

2. Define (1) a complete, (2) a regular, (3) a symmetrical flower, and name an example of each.

3. Explain the uses of the different parts of a complete flower.

4. State the general characters of (*a*) Cruciferae, (*b*) Leguminosae. Give examples.

5. Define (*a*) Epiphyte, (*b*) Parasite, (*c*) Saprophyte.

6. Explain the importance of Chlorophyll in plants.

7. Explain any three ways in which insect-pollinating flowers ward off the visits of unsuitable insects.

8. Describe how any one of our Canadian carnivorous plants captures insects.

9. How do plants prepare for winter, or for drought.

10. Give the general characteristics of (*a*) Mesophytes, (*b*) Xerophytes, (*c*) Hydrophytes.

PASS.

Animal Biology.

1. Specify some of the results that follow from the struggle for existence.

2. Name some vestigial organs to be found in animals in different branches of the animal kingdom.

3. Explain what is meant by the "body sense." Draw a lateral view of the human brain and mark on it the motor and the sensory areas.

4. Draw a diagram of a front to back section through the head, and mark upon it the relative positions of the respiratory tract, uvula, throat, tongue, palate, larynx, epiglottis, glottis, and gullet.

5. Enumerate in order the bones of the leg. Give rules for the care of the bones, and specify the reasons for the rules.

6. Give the general characters of the mollusca and distinguish the classes.

7. Give the general characters of the chordata. Distinguish the sub-phyla. Write notes on heredity.

Extra-Mural.

[Extra-murals and those who have not attended the pass class will write on questions 2, 6, and 7 of the above, and also upon the following]:

1. Describe the respiratory, and the nervous systems in the catfish.

2. Describe the shell of the snapping turtle.

3. Distinguish the different orders of carinatae.

4. Distinguish the classes of the Echinoderms and name common examples of each class.

Junior Chemistry.

1. (*a*) Define *equivalent weight*, *atomic weight*, and *molecular weight*. (*b*) Indicate how they are found. (*c*) Apply your definitions to oxygen, sulphur, nitrogen, carbon, and mercury.

2. (*a*) State the Law of Reciprocal Proportions. (*b*) Show that it is essential in establishing the atomic weights of the elements.

3. (*a*) Define *valency*. (*b*) Give examples of elements that are univalent, bivalent, trivalent, quadrivalent, and quinquevalent, and write formulas of compounds from which the valency can be deduced in each case.

4. (*a*) Write the equations for the complete combustion of methane, sulphuretted hydrogen, hydrogen, ammonia, and carbon monoxide. (*b*) Indicate the relative volumes of all the gases appearing in the equations. (*c*) If hydrogen combines with oxygen at 150° C, what volume of water is formed from 50 litres of hydrogen?

5. (*a*) Describe two ways in which a ferrous salt can be converted into a ferric salt. (*b*) Write the formulas of ferrous chloride, ferrous sulphate, ferrous carbonate, ferric bromide, ferric sulphate, ferric nitrate, and ferric phosphate.

6. Describe what takes place and write equations for the reactions in the following experiment: Calcium carbonate is dissolved in excess of hydrochloric acid, the solution is boiled and neutralized with ammonia, and ammonium carbonate is added.

7. Write a short account of the manufacture of sul-

phuric acid by the two methods in use. Give equations and formulas where possible.

8. Write equations for the action of ammonium hydroxide on (*a*) hydrochloric acid, (*b*) sulphuric acid, (*c*) ferric chloride, (*d*) aluminium sulphate, (*e*) silver chloride; and describe in each case any change in appearance.

9. Give names and formulas of the substances formed and describe what takes place when ammonium sulphide acts on (*a*) hydrochloric acid, (*b*) ferrous sulphate, (*c*) nickel chloride, (*d*) zinc sulphide, (*e*) chromic sulphate.

10. Describe the three elements, chlorine, bromine, and iodine, in such a way as to bring out their resemblances and differences in chemical and physical properties.

Senior Chemistry.

[Take Section B and either Section A or Section C. Write each section on a separate pad and mark the pad plainly.]

A.

1. (*a*) Write the formulas and names of the first *six* members of the paraffin series.

(*b*) Write graphic formulas for the third member and for all its possible *mono-chloro* derivatives.

(*c*) Indicate by equations how a paraffin is acted on by chlorine.

2. Describe, mentioning the conditions, the different ways in which sulphuric acid acts on ethyl alcohol. Equations.

3. Describe and compare the alkyl substitution products of ammonia (NH_3) and of phosphine (PH_3).

4. (*a*) Indicate by formulas the synthesis of lactic acid from aldehyde. (*b*) Discuss the isomerism of the lactic acids. (*c*) Define *hydroxy acid*, *amido acid*, *acid amide*, *acid anhydride* and *acid chloride* (acyl chloride), and write the formula of an example of each.

5. (*a*) Show the relations of the three principal classes of carbohydrates.

(*b*) By what processes can starch be converted into glucose?

(*c*) Write the graphic formulas of an aldose and of a ketose.

B.

1. Find the equation for the action of hot concentrated hydrochloric acid on potassium bichromate, the products

Junior Hebrew.

1. Translate I. Sam. IX. 17-19 ; x. 14-16 ; Gen. I. 6-8.

2. Parse all words in Gen. I. 14 ; I. Sam. x. 18 ; Ps. I. 1.

3. Explain clearly and in detail the use of (1) Dag. Lene, (2) Dag. Forte. Give three illustrations of (1) and one of (2).

4. Name three peculiarities of the Gutturals. Correct these words :

נְאֻמַר שָׂרִים שִׁמַע אֲבַרְתֶּם.

5. How are the possessive pronouns expressed? Translate: My word, his word, your word, thy (masc.) words, our words, their (masc.) great blessings.

6. How many classes of irregular verbs are there in Hebrew? How many "stems" has the verb? What is the characteristic of the Pi'el? Give the following parts of קָטַל :

Qal	*Niph'al*	*Pi'el*	*Hiph'il*
imperf. sing.	perf. plur.	3rd sing. perf.	3rd sing imperf.
inf. cons.	part.	" " imperf.	
act. part.		imper.	inf. cons.

What parts are the following :

תִּתַקְטְלִי מָקְטָל קְטַלְתֶּם אֶקְטֹל

7. Translate :

(1) אֱלֹהִים בָּרָא אֵת הַשָּׁמַיִם וְאֵת הָאָרֶץ:

(2) נָתַן הָאִישׁ אֶת הַחֶרֶב לַמֶּלֶךְ:

(3) וְקָרָא זֶה אֶל־זֶה וְאָמַר קָדוֹשׁ יְהוָה:

(4) שָׁמַרְתָּ אֵת אֲבִיוֹנֵי הָאָרֶץ מִכֹּל רָע:

(5) שָׁמַעְנוּ אֵת קוֹלוֹ מֵהֵיכָלוֹ:

8. Translate: (1) Man is dust out of the ground. (2) Who (are) these princes and heroes? (3) The law of Yahveh is good. (4) These (are) the proverbs of the wise king of Israel (יִשְׂרָאֵל). (5) The blessing of Yahveh (be) upon thy sons.

Senior Hebrew.

1. Give the imperative of נָתַן and the infinitive of יָשַׁב.

2. Give three phrases, in Hebrew, showing how the construct is used to make up for the lack of adjectives.

3. Give a brief note on the use of the Hebrew "tenses."

4. Jonah IV. 1, explain the verbal constructions; I. 4, parse each word; II. 2-4, translate carefully.

5. Parse each word in the following verses from Psalm XXXII. 1; XIX. 3; XXIX. 1.

6. Translate: My face is against this people. And God remembered the man whom he had created. I will not give my silver and my gold. And he took the child and made it pass over before him. And the priests blessed all the children of Israel.

7. Translate the following sentences:

לֹא תִשְׁמְרוּ אֶת־מִשְׁפְּטֵיהֶם: אֲנַחְנוּ נִכְרֹת עֵצִים
מִן־הַהָר: רְדְפוּ אַחֲרָיו: אָמַרְתִּי לִשְׁמֹר דְּרָכֶיךָ:
מִשְׁלֵי הָעָם הַזֶּה: מִי יִשְׁכֹּן בְּהַר יְהוָה: יָרְדוּ בְּנֵי
עֲקֹב מִצְרַיְמָה לִשְׁבָּר־אֹכֶל:

ARTS HONOUR PAPERS.

PRELIMINARY HONOURS.

Latin.

Roman History and Literature to 180 A.D.

[Give dates as far as possible. Do not attempt more than three questions in each part of the paper.]

A.

1. Estimate the influence exercised by the position, physical features and climate of Italy upon the rise of the Roman power.

2. Sketch the development of Rome under the Tarquin dynasty.

3. Describe the important measures associated with M. Furius Camillus and Caius Marius and contrast the results of their efforts.

4. Write a concise but clear account of the various *comitia* at Rome, giving their origin, constitution, powers, and history during this period.

5. Write clear notes on any THREE of the following: (*a*) The debt of the Roman drama to the Greeks. (*b*) Latin prose writing before Cicero. (*c*) The characteristics of lyric and elegiac poetry in the Augustan age. (*d*) Hannibal's campaign from Saguntum to Lake Trasimene.

B.

1. Show how and why Octavius succeeded as a statesman, and Pompey, Sulla, Cicero, and Julius Caesar failed.

2. Trace the change in the condition of the provinces and provincials from 14-180 A.D.

3. Describe the part played by the army in the making and unmaking of emperors during these years.

4. State the purpose and leading characteristics of Roman historical writing, and compare it in these respects with modern conceptions of history.

5. Give concise accounts of the following: L. Papirius Cursor, Zama, Jugurtha, Spartacus, Juvenal.

PRELIMINARY AND FINAL HONOURS.

Latin.

A.

[*Candidates in Preliminary Honours are only required to answer* EITHER (a) *or* (b) *in questions* 2, 4, 6, 8, *and translate* 9 *without notes.*]

1. Translate:

Quis enim hunc hominem dixerit, qui cum tam certos caeli motus, tam ratos astrorum ordines tamque inter se omnia conexa et apta viderit, neget in his ullam inesse rationem eaque casu fieri dicat, quae quanto consilio gerantur, nullo consilio adsequi possumus? an, cum machinatione quadam moveri aliquid videmus, ut sphaeram, ut horas, ut alia permulta, non dubitamus, quin illa opera sint rationis; cum autem impetum caeli cum admirabili celeritate moveri vertique videamus constantissime conficientem vicissitudines anniversarias cum summa salute et conservatione rerum omnium, dubitamus, quin ea non solum ratione fiant, sed etiam excellenti divinaque ratione?

CICERO, *De Natura Deorum*, xxxviii.

2. (*a*) What flaws do you notice in Balbus' attempt to prove that the *mundus* is *deus?* (*b*) State concisely the arguments employed by the Stoics to prove the existence of gods.

3. Translate:

Tu autem ignarus instituti mei, quanti ego genus omnino signorum omnium non aestimo, tanti ista quattuor aut quinque sumpsisti. Bacchas istas cum Musis Metelli comparas. quid simile? primum ipsas ego Musas numquam tanti putassem atque id fecissem Musis omnibus approbantibus; sed tamen erat aptum bibliothecae studiisque nostris congruens. Bacchis vero ubi est apud me locus?—at pulchellae sunt.—novi optime et saepe vidi. nominatim tibi signa mihi nota mandassem, si probassem. ea enim signa ego emere soleo, quae ad similitudinem gymnasiorum exornent mihi in palaestra locum. CICERO, *ad Fam.*, vii. 23.

4. Show how these letters illustrate (*a*) the state of Cicero's finances, (*b*) his cultured taste and *sensus communis* (social tact).

5. Translate:

Camillus identidem omnibus locis concionabatur: haud mirum id

quidem esse, furere civitatem, quae, damnata voti, omnium rerum potiorem curam, quam religione se exsolvendi, habeat. nihil de collatione dicere, stipis verius, quam decimae; quando ea se quisque privatim obligaverit, liberatus sit populus. enimvero illud se tacere, suam conscientiam non pati: quod ex ea tantum praeda, quae rerum moventium sit, decima designetur; urbis atque agri capti, quae et ipsa voto contineatur, mentionem nullam fieri. LIVY v. xxv.

6. (*a*) Adduce reasons in support of inserting *et* before *liberatus*. (*b*) Write notes on the expressions, *vectigalis, tributum, denis millibus aeris gravis reos condemnant.*

7. Translate:

At Romae, postquam Germanici valetudo percrebuit cunctaque ut ex longinquo aucta *in deterius* adferebantur, dolor ira: et erumpebant questus. ideo nimirum in extremas terras *relegatum*, Pisoni permissam provinciam; hoc egisse secretos Augustae cum Plancina sermones. vera prorsus de *Druso* seniores locutos: displicere regnantibus civilia filiorum ingenia, neque ob aliud interceptos, quam quia populum Romanum aequo iure complecti reddita libertate agitaverint. hos vulgi sermones audita mors adeo incendit, ut ante edictum magistratuum, ante senatus consultum sumpto *justitio* desererentur *fora*, clauderentur domus.

TACITUS, *Ann.*, iii. lxxxii.

8. (*a*) Write notes on the words italicized in the above passage. (*b*) Advance arguments in favour of the belief that Germanicus was murdered.

9. Translate with short notes.

Proelium tota nocte varium, anceps, atrox, his, rursus illis exitiabile. nihil animus aut manus, ne oculi quidem provisu iuvabant. eadem utraque acie arma, crebris interrogationibus notum pugnae signum, permixta vexilla, ut quisque globus capta ex hostibus huc vel illuc raptabat. urguebatur maxime septima legio, nuper a Galba conscripta. occisi sex primorum ordinum centuriones, abrepta quaedam signa: ipsam aquilam Atilius Verus primi pili centurio multa cum hostium strage et ad extremum moriens servaverat. Sustinuit labentem aciem Antonius accitis praetorianis. qui ubi excepere pugnam, pellunt hostem, dein pelluntur. namque Vitelliani tormenta in aggerem viae contulerant, ut tela vacuo atque aperto excuterentur, dispersa primo et arbustis sine hostium noxa inlisa. magnitud ineeximia quintae decimae legionis ballista ingentibus saxis hostilem aciem proruebat. lateque cladem intulisset, ni duo milites praeclarum facinus ausi, arreptis e strage scutis ignorati, vincla ac libramenta tormentorum abscidissent. statim confossi sunt eoque intercidere nomina: de facto haud ambigitur.

TACITUS, *Histories*, iii. xxii., xxiii.

PRELIMINARY AND FINAL HONOURS.

Latin.

Translate into Latin:

I.

For Preliminary and Final Honour Candidates.

The senators, as if they had been suddenly awakened from a dream of four hundred years, appeared on this important occasion to be inspired by the courage, rather than by the wisdom, of their predecessors They loudly declared, in regular speeches or in tumultuary acclamations, that it was unworthy of the majesty of Rome to purchase a precarious and disgraceful truce from a barbarian king; and that in the judgment of a magnanimous people, the chance of ruin was always preferable to the certainty of dishonour. The minister, whose pacific intentions were seconded only by the voices of a few servile and venal followers, attempted to allay the general ferment, by an apology for his own conduct, and even for the demands of the Gothic prince. "The payment of a subsidy, which had excited the indignation of the Romans, ought not (such was the language of Stilicho) to be considered in the odious light of a tribute or of a ransom, extorted by the menaces of a barbarous enemy. Alaric had faithfully asserted the just pretensions of the republic to the provinces which were usurped by the Greeks of Constantinople: he modestly required the fair and stipulated recompense of his services." GIBBON.

II.

For Final Honour Candidates.

As I am recommending myself to your love, methinks I ought to send you my picture (for I am no more what I was, some circumstances excepted, which I hope I need not particularise to you); you must add then to your former idea, a reasonable quantity of dulness, a great deal of silence, and something that rather resembles, than is, thinking; a confused notion of many strange and fine things that have swum before my eyes for some time, a want of love for general society, indeed an inability to it. On the good side you may add a sensibility to what others feel, and indulgence for their faults and weakness, a love of truth, and a detestation of everything else. Then are you to deduct a little impertinence, a little laughter, a great deal of pride, and some spirits. These are all the alterations I know of, you may find more. Think not that I have been obliged for this reformation of manners to reason or reflection, but to a severer school-mistress, Experience. GRAY.

PRELIMINARY AND FINAL HONOURS.

Latin

B.

[*Candidates in Preliminary Honours are only required to answer* (*a*) OR (*b*) *in questions* 2 *and* 4.]

1. Translate:

Nec, si materiem nostram collegerit aetas
post obitum rursumque redegerit ut sita nunc est,
atque iterum nobis fuerint data lumina vitae,
pertineat quicquam tamen ad nos id quoque factum,
interrupta semel cum sit retinentia nostri.
et nunc nil ad nos de nobis attinet, ante
qui fuimus, *neque* iam de illis nos adficit angor.

LUCRETIUS iii. 845-851.

2. (*a*) Compare the work of Lucretius and Vergil in form and expression OR criticize the Lucretian theory of the origin of life and civilization on this planet. (*b*) To what modern poet would you compare Lucretius and why?

3. Translate:

Junonis gravis ira, nec exsaturabile pectus
cogunt me, Neptune, preces descendere in omnes;
quam nec longa dies, pietas nec mitigat ulla,
nec Jovis imperio fatisve infracta quiescit.
non media de gente Phrygum exedisse nefandis
urbem odiis satis est, nec poenam traxe per omnem:
reliquias Troiae, cineres atque ossa peremptae
insequitur. causas tanti sciat illa furoris.
ipse mihi nuper Libycis tu testis in undis,
quam molem subito excierit: maria omnia caelo
miscuit, Aeoliis nequiquam freta procellis,
in regnis hoc ausa tuis.
per scelus ecce etiam Troianis matribus actis
exussit foede puppes; et classe subegit
amissa socios ignotae linquere terrae.
quod superest, oro, liceat dare tuta per undas
vela tibi, liceat Laurentem attingere Thybrim,
si concessa peto, si dant ea moenia Parcae.

VERGIL, *Aeneid* v. 781-798.

4. (*a*) Discuss Aeneas as the "Man of Destiny." (*b*) Connect this idea and the religious teaching of the Aeneid with the political situation in Vergil's day.

5. Translate, state the metre and scan a stanza:

Bacchum in remotis carmina rupibus
vidi docentem—credite posteri—
nymphasque discentes et aures
capripedum Satyrorum acutas.
euoe, recenti mens trepidat metu
plenoque Bacchi pectore turbidum
laetatur. euoe, parce Liber,
parce, gravi metuende thyrso!
fas pervicaces est mihi Thyiadas
vinique fontem lactis et uberes
cantare rivos, atque truncis
lapsa cavis iterare mella;
fas et beatae conjugis additum
stellis honorem, tectaque Penthei
disjecta non leni ruina,
Thracis et exitium Lycurgi.

HORACE, *Odes* ii. xix. 1-16.

6. Translate with brief explanatory notes where needed:

Si fortunatum species et gratia praestat,
mercemur servum qui dictet nomina, laevum
qui fodicet latus et cogat trans pondera dextram
porrigere. "hic multum in Fabia valet, ille Velina;
cui libet hic fasces dabit eripietque curule
cui volet importunus ebur." frater, pater, adde;
ut cuique est aetas ita quemque facetus adopta.

HORACE, *Epistles* i. vi. 49-55.

7. Translate with concise historical notes:

O felix, cui summa dies fuit obvia victo,
et cui quaerendos Pharium scelus obtulit enses!
forsitan in soceri potuisses vivere regno.
scire mori, sors prima viris, sed proxima, cogi.
et mihi, si fatis aliena in jura venimus,
fac talem, Fortuna, Jubam: non deprecor hosti
servari, dum me servet, cervice recisâ.

LUCAN, ix. 208-214.

8. Translate:

Nec tantum Clario Lyde dilecta poetae,
nec tantum Coo Bittis amata suo est,

pectoribus quantum tu nostris, uxor, inhaeres,
digna minus misero non meliore, viro.
te mea supposita veluti trabe fulta ruina est:
siquid adhuc ego sum, muneris omne tui est.
tu facis, ut spolium non sim, nec nuder ab illis,
naufragii tabulas qui petiere mei.
utque rapax stimulante fame cupidusque cruoris
incustoditum captat ovile lupus,
aut ut edax vultur corpus circumspicit ecquod
sub nulla positum cernere possit humo,
sic mea nescio quis, rebus male fidus acerbis,
in bona venturus, si paterere, fuit.
hunc tua per fortis virtus summovit amicos,
nulla quibus reddi gratia digna potest.
ergo quam misero, tam vero teste probaris,
hic aliquod pondus si modo testis habet.

Ovid, *Tristia* i. vi.

FINAL HONOURS.

Latin.

1. Translate and write notes on the italicized words:

(*a*) Ecce Dolabellae comitiorum dies: *sortitio praerogativae:* quiescit: *Renunciatur:* tacet. *Prima classis* vocatur: deinde ita, ut adsolet, suffragia: tum secunda classis: quae omnia sunt citius facta quam dixi. Confecto negocio bonus augur—C. Laelium diceres—*alio die* inquit. O impudentiam singularem! Quid videras? quid senseras? quid audieras? Nec enim te *de caelo servasse* dixisti nec hodie dicis. CICERO, *Philippic* ii. xxxiii.

(*b*) Sequuntur auditores actoribus similes, conducti et redempti: manceps convenitur: in media *basilica* tam palam *sportulae* quam in *triclinio* dantur: ex iudicio in iudicium pari mercede transitur. inde iam non inurbane Σοφοκλεῖς vocantur [ἀπὸ τοῦ σοφῶς καὶ καλεῖσθαι]: isdem Latinum nomen impositum est Laudiceni. et tamen crescit in dies foeditas utraque lingua notata. heri duo nomenclatores mei (habent sane *aetatem* eorum qui nuper *togas* sumpserint) ternis denariis ad laudandum trahebantur. tanti constat ut sis disertissimus. hoc pretio quamlibet numerosa subsellia implentur, hoc ingens corona colligitur, hoc infiniti clamores commoventur cum mesochorus dedit signum.

PLINY, *Letters* ii. xiv.

(*c*) Tabulas veterum aerari debitorum, vel praecipuam calumniandi materiam, exussit; loca in urbe publica iuris ambigui, possessoribus adiudicavit; diuturnorum reorum et ex quorum *sordibus* nihil aliud quam voluptas inimicis quaereretur nomina abolevit, condicione proposita, ut si quem quis repetere vellet, par periculum poenae subiret. Ne quod autem *maleficium negotiumve* inpunitate vel mora elaberetur, triginta amplius dies, qui honoraris ludis occupabantur, actui rerum accommodavit. Ad *tris iudicum decurias quartam* addidit *ex inferiore censu*, quae ducenariorum vocaretur iudicaretque de levioribus summis. SUETONIUS, *Augustus* §32.

2. Translate without notes:

(*a*) LE. O pater, patér mi, salve. CH. Sálve multum, gnáte mi.
LE. Síquid tibi, patér, laboris—CH. Níl evenit, né time:
Béne re gesta sálvos redeo—sí tu modo frugi ésse vis.
Haéc tibi pactast Cállicli huius fília. LE. Ego ducám, pater,
Ét eam et siquam aliám iubebis. CH. Quámquam tibi suscénsui,
Míseria una uní quidem hominist ádfatim. CA. Immo huíc parumst:
Nám si pro peccátis centum dúcat uxoris, parumst.

PLAUTUS, *Trinummus* 1180-1186.

Comment upon the syntax of *parumst*, and upon the view of marriage expressed here and in the play.

(*b*) His corpus tremulum conplectens undique vestis
candida purpurea talos incinxerat ora,
annoso niveae residebant vertice vittae,
aeternumque manus carpebant rite laborem.
laeva colum molli lana retinebat amictum,
dextera tum leviter deducens fila supinis
formabat digitis, tum prono in pollice torquens
libratum tereti versabat turbine fusum,
atque ita decerpens aequabat semper opus dens,
laneaque aridulis haerebant morsa labellis,
quae prius in levi fuerant extantia filo:
ante pedes autem candentis mollia lanae
vellera virgati custodibant calathisci. CATULLUS, lxiv.

(*c*) Quin ipsae stupuere domus atque intima Leti
Tartara caeruleosque implexae crinibus angues
Eumenides, tenuitque inhians tria Cerberus ora,
atque Ixionii vento rota constitit orbis.
VERGIL, *Georgics* iv. 481-484.

Explain the principles of case-construction illustrated by *Leti, angues, vento.*

(*d*) Declamationes vero, quales in scholis rhetorum dicuntur, si modo sunt ad veritatem accommodatae et orationibus similes, non tantum dum adulescit profectus sunt utilissimae, quia inventionem et dispositionem pariter exercent, sed etiam cum est consummatus ac iam in foro clarus; alitur enim atque enitescit velut pabulo laetiore facundia et adsidua contentionum asperitate fatigata renovatur. Quapropter historiae nonnumquam ubertas in aliqua exercendi stili parte ponenda et dialogorum libertate gestiendum. Ne carmine quidem ludere contrarium fuerit, sicut athletae remissa quibusdam temporibus ciborum atque exercitationum certa necessitate, otio et iucundioribus epulis reficiuntur. Ideoque mihi videtur M. Tullius tantum intulisse eloquentiae lumen, quod in hos quoque studiorum secessus excurrit. Nam si nobis sola materia fuerit ex litibus, necesse est deteratur fulgor et durescat articulus et ipse ille mucro ingenii cotidiana pugna retundatur. QUINTILIAN, x. v. 14-16.

3. Translate with explanatory notes:

Bacas vir nequis adiese velet ceivis Romanus neve nominus Latini neve socium quisquam, nisei pr(aetorem) urbanum adiesent, isque de senatuos sententiad, dum ne minus senatoribus C adesent quom ea res cosoleretur, iousiset. Censuere.
ALLEN, *Remnants of Early Latin* 82.

4. Briefly compare and contrast the spirit, aim and method of Horace and Juvenal as satirists.

PRELIMINARY HONOURS.

Greek.

Prose and Unseen Translation.

1. Translate into Greek :

Herodotus tells us that the wife of Intaphernes, when the choice was given her of saving either her husband or her brother, chose the latter, and gave as her reason that while she might get another husband, she could not get another brother, now that both her parents were dead. We find the same sentiment expressed in a story of later times; in this case it is said of a dear friend. According to this story, there was a certain man who was travelling with his wife and little children and an intimate friend. They were staying at an inn, as the friend had been wounded by robbers and was suffering great pain. During the night a fire broke out, and, as they were in an upper storey, they were in great danger of losing their lives. The husband, instead of taking up his wife, who clung to him, shook her off, telling her to save herself as well as she could, and taking up his friend on his shoulders succeeded with the greatest difficulty in reaching the street. When the bystanders upbraided the man for his deed he replied that he might get another wife and child, but such a friend as this one he never could find again.

2. Translate Thucydides Book II., chap. 71.

PRELIMINARY HONOURS.

Greek.

Aristophanes and Homer.

1. Translate with short notes:

Homer, Odyssey, V.	203– 227.
X.	20– 45.
Aristophanes, Birds,	274– 288.
	864– 879.
	1243–1256.

2. Describe the Homeric Society and State.

3. "They represent his scheme to have been nothing less than a radical reform of Athens in every department of public and private life." Are critics justified in attributing this aim to Aristophanes in the Birds?

PRELIMINARY HONOURS.

Greek.

Sophocles and Euripides.

1. Translate with short notes :

Sophocles, Electra, 610– 621.
926– 937.
Euripides, Orestes, 1635–1655.
126– 139.

2. Compare the general drift of the Electra of Euripides with the Electra of Sophocles.

3. Discuss the three main features of the Orestes which distinguish it from an orthodox tragedy.

PRELIMINARY HONOURS.

Greek.

1. Translate Thucydides, Book III. chap. 38.

2. Translate Plutarch, *Pericles* chap. 28, or *Acts* chap. 27 verse 27–end.

3. Account for the grouping of the various leading states round Athens and Sparta at the beginning of the Peloponnesian war.

4. Either (*a*) state in what respects Plutarch fails to do justice to Pericles, contrasting him with Thucydides; or (*b*) sketch the route followed by St. Paul on his second journey, noting the significance of the most striking incidents, or, *as an alternative*, describe, after St. Mark, the events of Christ's life after his triumphal entry into Jerusalem, and his appearances after the Crucifixion.

FINAL HONOURS.

Greek.

Thucydides, Herodotus, Demosthenes, Plutarch.

Translate and comment briefly on :

Thucydides, Book III., chap. 70.
IV., chap. 59.
Herodotus, Book VIII., 83.
IX., 122.
Plutarch, Solon, chap. VIII.
Demosthenes, Olynthiac III., §§ 33, 34.
De Corona, §§ 282, 283, 284.

FINAL HONOURS.

Greek.

Homer, Pindar, Aristophanes, Theocritus.

Translate with notes:

Homer, *Odyssey*,	XV.	454– 484.
Aristophanes, *Clouds*,		1494–1524.
Birds,		314– 330.
Pindar, *Olympian*,	IX.	80–end.
Theocritus, *Id.*,	II.	8I– 100.

FINAL HONOURS.

Greek.

Plato and Aristotle.

1. Translate :

Plato, *Republic* IX. chap. VII.
Aristotle, *Ethics* I. chap. 12.
X. chap. 4, §§ 1, 2.

2. Account for Plato's severity towards the Poets.

3. Describe Plato's democratic man.

4. What is the nature of pleasure according to the tenth book of the *Ethics*.

FINAL HONOURS.

Greek.

Aeschylus, Sophocles, Euripides.

Translate with short notes:

Aeschylus, Prom. Vinct.,	1071–end.
Agam.,	739– 771.
Sophocles, Electra,	584– 609.
Antigone,	100– 140.
Euripides, Medea,	976–1001.

FINAL HONOURS.

Greek.

General Paper.

1. State the aim and effect of Solon's reforms.

2. What were the services rendered to Greece by Themistocles?

3. In what light would the Confederacy of Delos present itself to an Athenian, a Milesian, a Corinthian about 440 B.C.?

4. What causes contributed chiefly to the downfall of Athens in 404 B.C.?

5. Compare the political situation implied by Demosthenes' *Olynthiacs* with that revealed in the *De Corona.*

6. What is the connection between the Mycenean civilization and the Homeric age?

7. Examine the plot of the Odyssey.

8. What is your favourite Greek tragedy? Give reasons for your preference.

9. "Comic effect is gained by attributing to well-known characters qualities, ideas, or actions which notoriously do not belong to them, as well as by gross exaggeration of their well-known qualities." Discuss this with special reference to the *Clouds* and the *Birds.*

10. Describe the society in which Theocritus lived.

FINAL HONOURS.

Greek.

Prose and Sight Translation.

1. Translate into Greek:

Seven friends and philosophers, who dissented from the religion of the sovereign, embraced the resolution of seeking in a foreign land the freedom which was denied them in their native country. They had heard, and they credulously believed, that the republic of Plato was realised in the despotic government of Persia, and that a patriot king reigned over the happiest and most virtuous of nations. They were soon astonished by the natural discovery that Persia resembled the other countries of the globe; that the king who affected the name of philosopher was vain, cruel, and ambitious; that the nobles were haughty, the courtiers servile, and the magistrates unjust; that the guilty sometimes escaped, and the innocent were often oppressed. The disappointment of the philosophers provoked them to overlook the real virtues of the Persians, and they were scandalized, more deeply perhaps than became their profession, with the plurality of wives and concubines, and the custom of exposing dead bodies to the dogs and vultures, instead of hiding them in the earth, and consuming them with fire. They returned at once, loudly declaring that they had rather die on the borders of the empire than enjoy the wealth and favour of the barbarians. —*Gibbon.*

2. Translate *Thucydides*, Book vii. c. 87.

PRELIMINARY, INTERMEDIATE AND FINAL HONOURS.

Zum Ueberetzen ins Deutsche.

1. The following day, we came upon a wide, flat valley, along which we skirted till we began to see, at the distance of two or three miles, on a piece of sloping ground, under a small hill, a strange assemblage of masses of steam waving in the evening breeze. Our eyes became fixed, of course, on this object, which every minnte had a different aspect. Presently. there shot up amongst the waving masses a column of steam, spreading at the top like a tree ; and I then felt sure that we were at length approaching the object of our journey. Crossing the flooded meadow-ground, and passing a farm-house on the hill-face, we came, about ten o'clock at night, to the field which contains these wonderful springs. It was still clear daylight. The ground seemed like a place where some work is going on that calls for extensive boilings of caldrons. Were 5,000 washer-women to work in the open air together the general effect, at a little distance, might be somewhat similar.

2. Roll on, thou deep and dark blue Ocean—roll !
Ten thousand fleets sweep over thee in vain ;
Man marks the earth with ruin—his control
Stops with the shore ; upon the watery plain
The wrecks are all thy deed, nor doth remain
A shadow of man's ravage, save his own ;
When, for a moment, like a drop of rain,
He sinks into thy depths, with bubbling groan,
Without a grave, unknell'd, uncoffin'd, and unknown.

3. (Nur für Zwischen-und Final-Kandidaten.)

To be serious.—The author is conscious of the numerous faults and imperfections of his work ; and well aware how little he is disciplined and accomplished in the arts of authorship. His deficiencies are also increased by a diffidence arising from his peculiar situation. He finds himself writing in a strange land, and appearing before a public which he has been accustomed, from childhood, to regard with the highest feelings of awe and reverence. He is full of solicitude to deserve their approbation, yet finds that very solicitude continully embarrassing his powers, and depriving him of that ease and confidence which are necessary to successful exertion.

4. Themata zu einem deutschen Aufsatz :

(*a*) Wie man ein Semester auf der hiesigen Universität zubringt.

(*b*) Ich habe nie verlangt, dass allen Bäumen gleiche Rinde wache.

(*c*) Heyses Novellestik.

PRELIMINARY, INTERMEDIATE AND FINAL HONOURS.

Geschichte der Deutschen Litteratur.

NOTA.—Es sind nur sieben der folgenden Fragen zu beantworten, No. 13 ausgenommen, die behandelt werden muss.

1. Wie teilt sich die epische Litteratur der ersten Blüteperiode ein? Nenne man Hauptwerke nebst Dichtern jeder Einteilung.

2. Vergleiche man den Minne- mit dem Meistergesang. Worin besteht der Wert des Letzteren?

3. Was sind Luther's Verdienste um die deutsche Litteratur und Sprache? Was verhinderte diese Verdienste bedeutender zu werden?

4. Wie wirkte die sogenannte humanistische Bewegung auf die Entwickelung der deutschen Litteratur. Vergleiche man die Wirkung derselben Bewegung in Frankreich und England.

5. Erwähne und bespreche man kurz gleichzeitige litterarische Bewegungen oder moden der Hauptkulturländer Europas in den 17. und 18. Jahrhunderten.

6. Welche Versuche sind in denselben Jahrhunderten zur Reform der deutschen Litteratur gemacht?

7. Was sind die grossen litterarischen Bewegungen der letzten Hälfte des 18. und der ersten Hälfte des 19. Jahrhunderts und deren gegenseitige Beziehungen?

8. Bespreche man kurz den Ursprung und Lauf des deutschen Dramas bis auf Lessing.

9. Skizziere man die Entstehung und Entwickelung der deutschen Novelle mit Hervorhebung der Hauptnovellendichter der letzten drei Jahrzehnte.

10. Stelle man einen allgemeinen Vergleich zwischen Lessing, Goethe und Schiller mit Bezug auf Lebensgang, litterarische Leistungen und Einfluss.

11. Bespreche man die realistische Bewegung der Letztzeit nebst Hauptträgern. In dieser Beziehung wie sind werke wie der „Schimmelreiter," „Frau Sorge" und „Jörn Uhl" zu betrachten.

12. Bezeichne man besondere politische Wirkungen auf die deutsche Litteratur seit dem 14. Jahrhunderte an.

13. Folgende Namen sind durch kurze, umfassende Anmerkungen zu erläutern :

Meister Eckhart, Hans Sachs, Martin Opitz, Abraham a Santa Clara, Klopstock, Bürger, Körner, Uhland, Theodor Storm, Sudermann ; *Teuerdank*, *Simplicissimus*, *Der sterbende Cato*, *Musarion*, *Soll und Haben*, *Der Kampf um Rom*.

PRELIMINARY, INTERMEDIATE AND FINAL HONOURS.

Deutsche Literatur—Poesie.

I.

(*a*) Du darfst auch da nur frei erscheinen ;
Ich habe Deinesgleichen nie gehaszt.
Von allen Geistern die verneinen
Ist mir der Schalk am wenigsten zur Last.
Des Menschen Thätigkeit kann allzuleicht erschlaffen,
Er liebt sich bald die unbedingte Ruh ;
Drum geb' ich gern ihm den Gesellen zu,
Der reizt und wirkt und musz als Teufel schaffen.
Doch ihr, die echten Göttersöhne,—
Erfreut euch der lebendig reichen Schöne !

(*b*) Nicht viel besser !—
Vermuthlich, ganz so *brausend* !—Doch, wer hat
Denn Dich auch schon gelehrt, mich so wie er
Mit einem Worte zu *bestechen ?* Freilich,
Wenn Alles *sich verhalt*, wie du mir sagest :
Kann ich *mich selber kaum in Nathan finden.*—
Indesz, er ist mein Freund, und meiner Freunde
Musz keiner mit dem andern *hadern.*—Lasz
Dich weisen ! Geh *behutsam !* Gieb ihn nicht
Sofort *den Schwärmern Deines Pobels preis !*
Verschweig', was deine Geistlichkeit, an ihm
Zu rächen, mir so nahe legen würde !
Sei *keinem Juden, keinem Muselmanne*
Zum Trotz ein Christ !

(*c*) Die Fürsten seh' ich und die edeln Herrn
In Harnischen herangezogen kommen,
Ein harmlos Volk von Hirten zu *bekriegen.*
Auf Tod und Leben wird gekämpft, und herrlich
Wird mancher Pasz durch blutige *Entscheidung.*
Der Landmann stürzt sich mit der nackten Brust,
Ein freies Opfer, in die Schar der Lanzen !
Er bricht sie, und des Adels *Blüte* fällt,
Es hebt die Freiheit siegend ihre Fahne.
Drum haltet fest zusammen—fest und ewig—
Kein Ort der Freiheit sei dem andern fremd—
Hochwachten stellet aus auf euren Bergen,
Dasz sich *der Bund zum Bunde rasch versammle*—
Seid einig—einig—einig—

(*d*) Freilich,
Kein kleiner Raub, ein so Geschöpf !—Geschöpf ?
Und wessen ?—doch der Sklaven nicht, der auf

Des Lebens öden Strand den Block geflösst
Und sich davon gemacht? Des Künstlers doch
Wohl mehr, der in dem hingeworfenen Blocke
Die göttliche Gestalt sich dachte, die
Er dargestellt?

1. Es wird ersucht, die in Cursivschrift gedruckten Worte zu erklären und die Beziehung jedes Auszugs zu seinem Werke festzustellen.

2. Commentiere man umfassend (*a*) und (*d*)

3. Führe man die allerletzten Worte des ganzen „Faust" an und vergleiche man sie mit den letzten Zeilen des ersten Auszugs (*a*)

4. Welche zwei Hauptanschauungen einer praktischen Lebensweise sind aus „Faust" zu schöpfen, und in welcher Beziehung stehen sie zu einander?

5. Wovon is Mephistopheles die poetische Verkörperung?

6. In welchem Verhältniss steht „Nathan der Weise" za der deutschen Aufklärung, (*b*) zu Lessing's „Erziehung des Menschengeschlechts."

7. Was bezweckt das Lyrische in „Wilhelm Tell."

8. Bespreche man dramatische Mängel in „Nathan," „Wilhelm Tell," und „Faust."

II.

1. Eine kurze und genau zusammenhängende Inhaltsangabe von „Wilhelm Tell."

2. Erklärungen zu:

Jeder Aufschub tödtet.—Wenn ihr frisch beilegt, holt ihr ihn ein.—Er ist entwischt.—Der kluge man baut vor.—Nach Uri fahr' ich stehenden Fusses.—Hab Dank der guten Zeitung.—So sieh doch einem Alten etwas nach.

Citiere man (*a*) aus „Wilhelm Tell" lyrische oder sprichwörtlich gewordene Stellen, (*b*) aus „Faust" die Schilderung des Weltalls, des Erdgeistes oder der Sorge, (*c*) aus „Nathan" die Schilderung der wahren Religion oder der Bescheidenheit.

PRELIMINARY, INTERMEDIATE AND FINAL HONOURS.

Dictat.

Ich habe mir heute früh beim Aufwachen überlegt, wie seltsam es doch ist, dass die verschiedenen Stände einander gegenseitig um eine Freiheit beneiden, die in keinem zu finden ist, wo überhaupt noch ein Standesgefühl bewahrt wird. Vielleicht in derselben Stunde, wo ich sehnsüchtige Blicke in das Leben dieser einfachen Menschen that, die unter Reben, Maisfeldern und Maulbeerbäumen ihre Tage so paradiesisch hinleben und von den hundert engen, eingemauerten, kleinstädtischen Rücksichten der sogenannten Gebildeten nichts wissen, wie der Seidenwurm nicht ahnt, wie viel glänzendes Elend sein Gespinnst vielleicht verschleiern wird —in derselben Minute vielleicht schien ihnen die Freiheit einer Städterin, auf eigene Gefahr ihren Tag mit Spazierengehen zu verbringen, wie ein ganz übermenschliches Glück, da sie Stunde um Stunde ihrem harten Tagewerk schuldig sind, und wenn sie Sonntags feiern, sich von der schwerfälligen Sitte, die auch ihre Ruhe einschränkt, so wenig losmachen können, wie sie in der Sommerhitze ihren hundertfaltigen schwarzen Rock mit einem leichteren vertauschen dürften.

PRELIMINARY, INTERMEDIATE AND FINAL HONOURS.

Deutsche Literatur—Prosa.

I.

1. Es ist der Zusammenhang folgender Stellen mit ihren Werken zu bezeichnen, auch sind die in Cursifschrift gedruckten Worte zu erklären.

(*a*) So kam dieser *Wirbel* über die Kinder von Wentorf, riss den, der bleiben wollte, in *die Fremde* und schlug dem, der gehen wollte, die Thür vor der Nase zu ; stellte den Arbeiterssohn auf die kahle, öde Heide und zeigte seinem lebendigen Sinn in *dunstiger* Ferne alle Schätze der Welt und ihre Herrlichkeit und warf dem Herrensohn eine blauleinene Stalljacke vor die Füsse.

(*b*) Als er nach Hause kam, die *Räume* wieder betrat, in denen er gestern so angenehm geträumt, so schöne *Kartenhäuser gebaut hatte*, wollte ihm der *desperate Humor*, mit dem er den Ausgang des Abenteuers bis dahin betrachtet hatte, doch nicht *Stand halten*. Es war ihm ganz unmöglich, zu thun, als ob nichts *vorgefallen* wäre, und über das *Zwischenspiel* hinweg nun wieder gleich der pflichtgetreue Candidat des Staatsexamens zu werden, alle „Taugenichts"-Gelüste, für ewig abzuschwören und reumüthig zu dem alleinseligmachenden Staats- und Kirchenrecht zurückzukehren.

(*c*) Sepp, sagte das Mädchen, nachdem sie lange geschwiegen, dein Lebtag kannst dem Himmelvater nicht Dank genug sagen, dass es so und nicht anders gekommen ist. *Mir stehen noch alle Haare zu Berg*, wenn ich dran denk', wie's hätte werden können. Und von wegen dem Andern, da frag' einmal wieder an, wenn's Laub wieder *ausschlägt*. Und wenn du den Baron siehst, sag ihm einen schönen Grusz von mir, und das Briefel das *heb'* ich *auf*, bis es soweit ist. Denn einstweilen müszt' ich mir's noch *bedenken*.

(*d*) Er kam dann eine Stunde nach Mitternacht wieder und bestand darauf, die Frau *abzulosen*. Sie konnte seiner herrschenden Art nicht widerstehen und bat ihn nur, *die Nachtwache zwischen ihnen Dreien zu theilen*, was er versprach und diesmal auch hielt. Denn am Morgen, als Frau Lucilie erwachte, sasz die *Wärterin* am Bette des Kindes, und der Doctor lag auf einem Strohsacke drüben im Gastzimmer, um näher bei der Hand zu sein.

(*e*) Sie sind *Lutheraner?* fragte er. Als ich es *bejahte*, bemerkte er mit einem milden Lächeln : Sie werden es nicht

bleiben. Sie werden durch das Liebesglück, das Sie hier gefunden, noch ein gröszeres Heil gewinnen. Besuchen Sie mich morgen ; wir sprechen weiter davon.

Ich versäumte nicht, mich einzufinden : aber von der Linie, *die ich mir vorgezeichnet hatte, liesz ich mich keinen Zollbreit abdrängen. Ich nahm für mich selbst die volle Gewissensfreiheit in Anspruch*, die ich auch meiner Braut *gewähren* wollte. *Was die Kinder betraf, so sollte die Mutter darüber entscheiden, bis sie selbst in der Frage über ihr Seelenheil eine Stimme haben würden.*

(*f*) Da ist nichts zu schämen, sagte sie. Liebe macht den Klügsten zum Narren, heiszt's im Sprüchwort. Sie haben mir auch gar nichts *zu Leide gethan* ; denn obwohl ich Sie recht gern gehabt hab', ich sterb' eben nicht daran, dass ich Sie nicht *krieg'*. Ich hab' schon einmal einen Schatz gehabt, und wie der eine Andere genommen hat, nur ums Geld, hab' ich gemeint, es *bringt* mich *um*, und hernach ist mir das Leben doch wieder lieb geworden.

(*g*) Es ist nur ein Abenteuer, was ich erzählen will, eines, dessen *Knoten* sich leicht und leichtsinnig *schürzte*, um plötzlich von der scharfen Sichel des Todes durchschnitten zu werden. Es wird nicht an Solchen fehlen, denen dieser Schnitt zu jäh und heftig durchs Herz geht. Diese werden darüber klagen, dass die *poetische Gerechtigkeit* fehle, dass sie von einem solchen Schicksal ohne *Versöhnung* scheiden müssen.

2. Welches von den oben citierten Stellen sind nicht in rein hochdeutscher Sprache verfasst, und warum ?

3. Bezeichne man Heyse's Schreibweise aus irgend welchen der ihm oben zukommenden Citate.

4. Vergleiche man, unter Angabe des leitenden Motivs, ein ,,Abenteuer" oder ,,Vetter Gabriel" mit dem ,,Verlorenen Sohn."

5. Bespreche man ,,Vetter Gabriel," ,,Am todten See," ,,Beatrice" und den ,,Verlorenen Sohn" von den Standpunkten aus der *Wahrscheinlichkeit* und der *Nothwendigkeit.*

6. Es wird ersucht einen Vergleich zu stellen zwischen ,,Jörn Uhl", ,,Frau Sorge" und dem ,,Schimmelreiter."

7. Skizziere man den Werdegang Jörn Uhls bis zu seinem Mannesalter.

8. Bespreche man die Erziehungsansichten, die dabei an den Tag gelegt werden.

9. Welcher Werth wird auf die Arbeit gelegt und wie wird zur Bekräftigung Goethe in Anspruch genommen.

PRELIMINARY, INTERMEDIATE AND FINAL HONOURS.

German.

SIGHT TRANSLATION.

I.

1. Nicht lange danach gab es Unruhen in Ungarn, die den König von Böhmen, Ferdinand, beschäftigten. Jenes Land wollte diesen nicht zum König haben ; nur eine kleine Partei war dafür. So ging nun Ferdinand daran, ein Heer wider die Ungarn auszurüsten und hatte unter anderen Fürsten auch den Markgrafen Casimir aufgefordert, sich zu beteiligen. Einer seiner Räte brachte ein diesbezüglich Schreiben nach Ansbach. Der wusste auch Näheres von der Erstürmung Roms zu erzählen ; dass der Bourbon dabei gefallen sei und so nicht hatte hindern können, dass die kaiserlichen Landsknechte die ewige Stadt ganz und gar ausplünderten und verhöhnten, denn sie hatten dort einen lächerlichen Aufzug veranstaltet und laut gerufen, sie wollten das ganze Papsttum mitnehmen und dem Luther schenken.

Auf diese Ladung hin, blieb dem Fürsten keine Zeit mehr für Reigerungsgeschäfte. Er bereitete sich und seine Truppen zum Aufbruch vor und stand Ende Juni kampfgerüstet vor Johann, um Abschied zu nehmen.

2. Wenn die Mythen für den Glauben jetzt Alles verloren haben, so haben sie für das Wissen gewonnen ; es giebt erst jetzt eine Mythologie, eine Wissenschaft der Mythen. Sie lehrt uns erkennen, dass den religiosen Anschauungen der Völker geistige Wahrheit zu Grunde lag, der Irrthum aber darin bestand, dass die täuschenden Bilder, in welche die Dichtung jene Wahrheiten kleidite, für wirklich angesehen wurden. Die Uroffenbarung war verdunkelt oder gar verloren, den Gedankenbildern der Dichtung lag oft die volle Wahrheit nicht zu Grunde : um so weniger konnten sie genügen und mit dem Scheine der Wirklichkeit lange bestechen.

II.

(For Intermediate and Final Candidates only.)

1. Nun bildet, ausschliestlich vom Gesichtspunkt der objectiven Zweckerfolge betrachtet, das Sittliche kein Reich für sich, welches den übrigen Gebieten geistigen Lebens, der staatlichen Wirksamkeit, dem Leben in Familie und Gemeinde, der Berufserfüllung, der intellectuellen und künstlerischen Thätigkeit, als ein specifisch verschiedenes gegenüberzustellen wäre. Zugleich aber ist keine dieser Thätigkeiten an und für sich von sittlichem Werthe, sondern es muss zunächst eine Bedingung hinzukommen, welche überall erst die einzelne Thatsache der ethischen Beurtheilung zugänglich macht: der objective Zweckerfolg muss mit den allgemeinen Zwecken der menschlichen Gemeinschaft in Uebereinstimmung stehen. Was der Einzelne zu eigener Uebung und Vervollkommnung thut, wird erst in dem Augenblick zum sittlichen Zweck, wo die individuelle Uebung zur Erreichung solcher Erfolge dient, die einen allgemeingültigen, nicht blos einen subjectiven Werth besitzen.

2. (Zum Uebersetzen ins Neuhochdeutsche).

An dem vierden morgen zwên und drîzec man
sach man ze hove rîten. daz wart dô kunt getân
Gunther dem vil rîchen, im wære widerseit.
von lüge erwuohsen vrouwen diu aller grœzesten leit,

Urloup si gewunnen, daz si für solden gân,
und jâhen daz siz wæren die Liudegêres man,
den ê dâ hete betwungen diu Sîfrides hant
unt in ze gîsel brâhte in daz Guntheres lant.

Die boten er dô gruozte und hiez si sitzen gân.
ir einer sprach dar under ,,herre, lât uns stân
unz wir sagen mære diu iu enboten sint.
jâ habet ir ze vînde, daz wizzet, maniger muoter kint.

INTERMEDIATE AND FINAL HONOURS.

Deutsche Philologie.

Zum Uebersetzen ins Neuhochdeutsche.

1. 31. Jah qemum than aithei is jah brothrjus is jah uta standandona insandidedun du imma, haitandona ina. 32. Jah setun bi ina managei ; qethun than du imma : sai, aithei theina jah brothrjus theinai jah svistrjus theinos uta sokjand thuk. 33. Jah andhof im qithands : hvo ist so aithei meina aiththau thai brothrjus meinai ? 34. Jah bisaihvands bisunjane thans bi sik sitandans qath : sai, aithei meina jah thai brothrjus meinai. 35. Saei allis vaurkeith viljan guths, sa jah brotuar meins jah svistar jah aithei ist. 1. Jah aftra Iesus dugann laisjan at marein, jah galesun sik du imma manageins filu, svasve ina galeithan*dan* in skip gasitan in marein ; jah alla so managei vithra marein ana statha vas. 2. Jah laisida ins in gajukom manag, jah qath im in laiseinai seinai : 3. hauseith ! Sai, urrann sa saiands du saian fraiva seinamma. 4. Jah varth, miththanei saiso, sum raihtis gadraus faur vig, jah qemun fuglos jah fretun thata.

(Nota—Nur Final-Kandidaten sollen die letzten 4 Verse uebersetzen.)

(*a*) Bezeichne man die grammatische Form jedes Wortes in den ersten drei Versen.

(*b*) Gebe man die Hauptformen der Zeitwörter und die vollständige Deklination der Haupt- und Fürwörter derselben Verse. Conjugiere man *haitandona* und *sokjand* im Ind. des Präs. und des Prät.

2. (Nur für Final-Kandidaten).

So sie nan tho gisahun, so riafun sie alle gahun :
ingegin imo inbran thaz muat, so ofto fianton duat.
Batun tho ginuagi, thaz man inan irsluagi,
ioh riafun filu heizo : 'cruzo, les ! nan cruzo !'
'Nemet inan,' quad er, 'zi iu inti cruzot inan untar iu :
ni mag ih in imo irfindan, oba er firdan si so fram.'
Thero biscofo herti gab imo antuuurti
mit alten nides uuillen : ni mohtun sie in gistillen.

(*a*) Hauptformen aller starken Verba, und Deklination der Haupt- und Fürwörter der ersten vier Zeilen.

3. Er bringet niuwemære her in ditze lant.
die küenen Nibelunge sluoc des heldes hant,
Schilbunc und Nibelungen, diu richen küneges kint.
er frumte starkiu wunder mit sîner grôzen krefte sint.

Dâ der helt al eine ân alle helfe reit,
er vant vor einem berge, daz ist mir wol geseit,
bî Nibelunges horte vil manegen küenen man:
die wâren im ê vremde, unz er ir künde dâ gewan.

Hort der Nibelunges der was gar getragen
ûz eime holen berge. nu hœret wunder sagen,
wie in wolden teilen der Nibelunge man.
daz sach der degen Sîvrit: den helt es wundern began.

(*a*) Gebe man die Hauptformen der starken Verba des letzten Auszugs, sowie die derselben Verba im Gothischen und im Neuhochdeutschen.

II.

1. Wie ist die Aussprache der auslautenden, neuhochdeutschen Buchstaben, b, d, g, etymologisch berechtigt?

2. Erkläre man etymologisch Unregelmässigkeiten, wie „Zwanzig Mann," „30 Stück," „Ich bin es zufrieden."

3. Erkläre man, die zwei Lautverschiebungen, mit Angabe der Zeit des Entstehens.

4. Erwähne man Hauptunterschiede zwischen mittel- und Neuhochdeutsch im Vokallautbestande.

5. Gebe man eine Kurzgefasste Inhaltsangabe des „Nibelungenlied" an und deute man das darin enthaltene, mythische Element.

6. (Für Final-Kandidaten.) Was ist das Versmass der in Betracht kommenden Althochdeutschen Gedichte? Wie erklären Sie den Ursprung des Endreims?

7. Was beabsichtigt Freytag in der Schilderung der Hauptstände seines Romanes und welche Spuren politischer oder wirthschaftlicher Tendenzen oder des Zeitgeistes gibt es darin?

8. Bespreche man die Einheit der Handlung, die Wahrscheinlichkeit und den Realismus oder Idealismus, (*a*) „Der Verlorenen Handschrift," (*b*) des „Jörn Uhl."

9. Würdige man die Schilderung der Schlacht bei Gravelotte in „Jörn Uhl."

INTERMEDIATE AND FINAL HONOURS.

Deutsche Litteratur—Prosa.

NOTA—Zwischen-Kandidaten sollen das sie nicht Angehende unberuehrt bleiben lassen.

(*a*) Wenn ich Ihnen vorher gesagt hätte ?—Als ob sein Tod in meinem Plane gewesen wäre ! Ich hatte es *dem Angelo auf die Seele gebunden*, zu *verhüten*, dasz niemanden *Leides* geschähe. Es würde auch ohne die geringste Gewaltthätigkeit *abgelaufen* sein, wenn sich der Graf nicht *die erste* erlaubt hätte. Er schosz *Knall und Fall* den einen nieder.

(*b*) Herrn Spazzos *Art verdrosz* ihn. Auch Praxedis hatte ihm weh gethan. Uns zu demüthigen, dachte er, hat der Herr die *Kinder der Wüste* herübergesandt, –eine *Mahnung zu lernen* und *in sich zu gehen* und *auf den Trümmern des Vergänglichen dem sich zuzuwenden, was mit dem Hauch des Ewigen gefeit ist;*—noch liegt die Erde frisch auf dem Grab der Gefallenen, und schon treibt das Völklein wieder seine Spässe, als wär' Alles nur Schaum und Traum gewesen.

(*c*) Ohne des Althias Befehl oder Erlaubnis abzuwarten, *sprengte* Aigan, der erste Führer der Hunnen, sobald er *vernommen*, hier sollte heute *gelagert*, morgen *geschlagen* werden, auf den Hügel zu. Die andern Hunnenführer und ihre Schwärme folgten ihm *pfeilschnell*. Er liesz Althias sagen, auf dem Hügel würden die Hunnen heute *nächtigen* und morgen Stellung nehmen. Althias *hütete sich, zu verbieten*, was er nicht ohne Blutvergieszen *wehren* konnte. Aber der Hügel *beherrschte* die Gegend.

(*d*) Man fand ihn morgens an einer Mauer *gelehnt*, im traumschweren Schlaf. Er wurde ins *Lazarett geschafft*, wo er an Typhus krank lag. Es quälte ihn die *Einbildung*, dasz der neusilberne *Geschützaufsatz abhanden gekommen wäre*, und dasz seine *Leute* meinten, er, hätte ihn heimlich *beiseite geschafft, aus Feigheit*, um nicht mehr gegen den Feind zu müssen. Diesen quälenden Traum hat der Kranke über hundert Meilen weit mit sich getragen. Der Traum *wich* erst, als er in Straszburg im Lazarett in sorgsame Pflege kam.

(*e*) Ich würde ihm sagen : Leicht kann der Hirt eine ganze Heerde Schafe vor sich hintreiben, der Stier zieht seinen Pflug *ohne Widerstand* ; aber dem edeln Pferde, das Du reiten willst, muszt Du seine Gedanken *ablernen*, Du muszt nichts Unkluges, nichts *unklug* von ihm verlangen.

Darum wünscht der Bürger seine alte *Verfassung* zu behalten, von seinen Landsleuten regiert zu sein, weil er weisz, wie er von ihnen *Uneigennutz*, *Theilnehmung* an seinem Schicksal hoffen kann.

(*f*) Der Professor fand seine Frau im dunklen Zimmer vor *sich hinbrütend*. „Willst du einen *Adelsbrief* haben?" rief sie aufspringend, „er wird auf der Stelle für dich ausgefertigt und für den Vater auch, damit wir alle den Vorzug erhalten, volle Menschen zu werden. mit denen die Leute im Schlosz verkehren können, ohne sich gedemüthigt zu fühlen."

(*g*) „Er argwöhnt, dasz in einem Hause unseres Fürstenthums eine alte Handschrift verborgen liege, *deszhalb* hat er die Tochter des Hausbesitzers, und da er *trotzdem* seinen Schatz nicht gefunden, sucht er jetzt in der Stille dies Nebelbild anf allen Böden der Residenz."

1. (*a*) Zeige man die Beziehung jeder der oben angeführten Stellen zu ihrem Werke und erkläre oder bespreche man die in Kursivschrift gedruckten Worte.

(*b*) Uebersetze man (*d*)

2. Wie ist Lessings Reform des deutschen Dramas verwirklicht in „Emilia Galotti"?

3. Bespreche man das Stück unter den Rubriken, (*a*) Charakter- oder Intriguentragödie, (*b*) Einheit der Handlung.

4. Gebe man in grossen Zügen den Inhalt von „Egmont" an und bezeichne man Hauptabweichungen von der historischen Wahrheit mit deren Zweck, sowie Vorzüge oder Mängel des Stückes.

5. Was ist die historische Unterlage bei der gelesenen historischen Romanen, wie weit weichen sie davon ab und warum?

6. Vergleiche man beide Romane in Bezug auf naturgetreue Schilderungen unter Hinweisung auf betreffende Stellen, sowie geschichtliche Wahrheit und Verfahrungsart der Dichter.

7. Was ist die Rolle des Evangeliums der Tat in ,,Faust," besonders im 2ten Teil? Citiere man deisbezügliche Worte.

8. (*a*) Wie ist *Homunculus* zu deuten? (*b*) Was ist die Beziehung der classischen *Walpurgisnacht* zum Gedicht u. zum Faust-Problem? (*c*) Behandle man die *Himmelsfahrt* in gleicher weise.

9. Was sind *Determinismus* und *Indeterminismus?* Stehen sie in irgend einem Verhältniss zu einander? Wie werden sie in ,,Faust" behandelt. (Auch fur Zwischen-Kandidaten.)

10. Unter welchen Umständen entstand der ,,Trompeter von Säkkingen" und wie wurde er vollendet? Was sind seine Stoff- und Formquellen und in wie fern ist er subjectiv?

(Final-Kandidaten sollen die folgenden zwei Fragen nicht beantworten.)

11. Welche Beziehungen haben ,,Wilhelm Tell" und die ,,Jungfrau von Orleans" zu gleichzeitigen politischen Ereignissen? Eine kurzgefasste Inhaltsangabe letzteren Stückes wird ersucht.

12. Welche Lehren enthält die Ballade: der Zauberlehrling?

INTERMEDIATE AND FINAL HONOURS.

Deutsche Litteratur—Poesie.

NOTA—Zwischen-Kandidaten sollen die sie nicht angehenden Fragen unbeantwortet lassen.

(*a*) Es gibt keinen Zufall ;
Und was *uns* blindes *Ungefähr* nur *dünkt*,
Gerade das *steigt aus den tiefsten Quellen.*
Versiegelt hab' ich's und *verbrieft*, dasz er
Mein guter Engel ist, und nun kein Wort mehr !

(*b*) O, sie kann mit mir *schalten*, wie sie will,
Mein Herz ist weiches Wachs in ihrer Hand.
—Umarmet mich, Du Chatel ; ich vergeb' Euch.
Geist meines Vaters *zürne* nicht, wenn ich
Die Hand, die dich getötet, freundlich fasse.
Ihr Todesgötter, *rechnet mir's nicht zu*,
Dass ich mein schrecklich Rachgelübde breche.

(*c*) *Mässigung* ! Ich habe
Ertragen, was ein Mensch ertragen kann.
Fahr hin, lammherzige *Gelassenheit !*
Zum Himmel fliehe, leidende Geduld !
Spreng' endlich deine Bande, tritt hervor
Aus deiner Höhle, *langverhaltner* Groll !
Und du, der dem *gereizten* Basilisk
Den Mordblick gab, leg' auf die Zunge mir
Den *gift'gen Pfeil.*

(*d*) Sie blasen
Mir *schadenfroh* die Asche von der Seele,
Und leiden nicht, dass sich die letzten Kohlen
Von unsers Hauses Schreckensbrande still
In mir *verglimmen.* Soll die Gluth denn ewig,
Vorsätzlich angefacht, mit Höllenschwefel
Genährt, mir auf der Seele marternd brennen ?

(*e*) Ich kenne mich in der Gefahr nicht mehr
Und schäme mich nicht mehr, es zu *bekennen.*
Zerbrochen ist das Steuer, und es kracht
Das Schiff an allen Seiten. Berstend reisst
Der Boden unter meinen Füssen auf !
Ich fasse Dich mit beiden Armen an !
So klammert sich der Schiffer endlich noch
Am Felsen fest, an dem er *scheitern* sollte.

(*f*) Noch hab' ich mich in's Freie nicht gekämpft.
Könnt ich Magie von meinem Pfad entfernen,
Die Zaubersprüche ganz und gar verlernen,
Stünd' ich, Natur ! vor dir ein Mann allein,
Da wär's der Mühe werth ein Mensch zu sein.

(*g*) —Abschied, Abschied, böse Stunde !
Wer hat dich zuerst *ersonnen ?*
Sicher war's ein böser Mann am
Fernen Eismeer ; frierend blies der
Nordpolwind ihm um die Nase,
Zottig eifersüchtig Eh'weib
Plagte ihn,—es *schmeckte nimmer*
Ihm des Wallfischs süsser Thran.

1. (*a*) Man zeige die Beziehung der oben citierten Stücke zu ihren Werken und deute oder bespreche die in Kursivschrift gedruckten Worte.

(*b*) Commentiere man (*f*).

(Nur vier der folgenden sieben Fragen sind zu beantworten, No. 5, ausgenommen.)

2. Mit welcher christlichen Lehre lässt sich der Grundgedanke der ,,Iphigenie" vergleichen und wie? Ist Goethe davon ausgegangen ?

3. Citiere man aus ,,Iphigenie" die Wörte,—oder verweise man darauf—die den Hauptunterschied der Anschauungsweise des griechischen und des neuen Dichters zum Ausdruck bringen. Füge man seine eigene Meinung hinzu.

4. Es bildet ein Talent sich in der Stille,
Sich ein Charakter in dem Strom der Welt.

Wo kommen diese Worte vor ? Wie sind sie da und in etwaigen anderen Goeth'schen Dichtungen ausgeführt ?

5. Gebe man kurz u. in grossen Zügen den Inhalt des ,,Faust II" an.

6. Wie viel Selbsterlebtes ist in den betreffenden Werken Goethes zu finden ?

HONOURS.

French.

Dictation.

Puis les officiers se rassirent, et les Alpins, qui faisaient la soupe, remarquèrent que les chefs, là-bas, parlaient moins et ne riaient plus.

Cependant, au café, les propos reprirent et les heures passèrent dans cette fraternité d'aventure, dans ce bavardage d'une longue halte; et, presque vers le soir, on se sépara en échangeant des poignées de main d'abord, puis, comme si tout redevenait officiel brusquement, des saluts militaires. Alors les Italiens se retirèrent, descendant lestement le versant qu'ils avaient gravi le matin. Deberle les suivait des yeux, debout sur la crête; il écoutait les bruits de voix, les cliquettements des armes. Les Italiens disparaissaient au flanc de la montagne, suivant les lacets de la route, et se faisaient de plus en plus petits, là-bas, dans les fonds.

Quand il se retourna, les ayant perdus de vue, Deberle aperçut les tentes dressées de sa troupe, les feux allumés déjà sur l'Alpe verte, et dans la paix du soir, au-dessus du bivouac, les étoiles, les premières étoiles. Plus de bruit: çà et là quelques voix à l'accent gascon, provencal, limousin. Une chanson de campagnard, un refrain de café-concert. Des bruits de cuillers dans la gamelle, une sensation de repos, de bien-être et de vie. —*Jules Claretie.*

HONOURS.

French.

Unseen Translation.

[Preliminary Honour Students will omit question 3.]

Traduisez en anglais :

1. L'INCENDIE DES MEULES.

La route qu'ils suivaient montait toujours; le terrain, en pente, leur cachait l'horizon. Ils arrivèrent en haut, près de la Butte;—et, d'un seul coup d'œil, le désastre leur apparut.

Toutes les meules, çà et là, flambaient comme des volcans, au milieu de la plaine dénudée, dans le calme du soir.

Il y avait, autour de la plus grande, trois cents personnes, peut-être; et sous les ordres de M. Foureau, le maire, en écharpe tricolore, des gars avec des perches et des crocs tiraient la paille du sommet, afin de préserver le reste.

Bouvard, dans son empressement, faillit renverser madame Bordin, qui se trouvait là. Puis, apercevant un de ses valets, il l'accabla d'injures pour ne l'avoir pas averti. Le valet, au contraire, par excés de zèle, avait d'abord couru à la maison, à l'église, puis chez Monsieur, et était revenu par l'autre route.

Bouvard perdait la tête. Ses domestiques l'entouraient, parlant à la fois, et il défendait d' abattre les meules, suppliait qu'on le secourût, exigeait de l'eau, réclamait des pompiers.

—" Est-ce que nous en avons !" s'écria le maire.

—" C'est de votre faute !" reprit Bouvard.

Il s'emportait, proféra des choses inconvenantes, et tous admirèrent la patience de M. Foureau, qui était brutal cependant, comme l'indiquaient ses grosses lèvres et sa mâchoire de bouledogue.

—*Gustave Flaubert.*

2. LES GONDOLES A VENISE.

Le ciel s'embrase peu à peu des feux du soir, et cette mer qui est sous nos fenêtres prend insensiblement une teinte d'azur légèrement rosée, dont le riant et pur éclat se reflète dans l'âme en secrète et sereine allégresse. En même temps tout se ranime sur les flots, et autour des bâtiments plus gros qui stationnent çà et là pittoresquement ombragés de lambeaux de voiles et de nattes dressées, d'innombrables gondoles circulent avec une charmante prestesse. Cette embarcation, particulière à Venise, est une sorte de longue et basse péniche dont le centre supporte un petit pavillon fermé de jalousies qui abrite un divan commode. A l'avant la proue se redresse en

une plaque de métal, dont la forme, comme celle du col de cygne, est élégante et fière, tandis que sur l'arrière un seul homme, debout, et comme suspendu sur l'extrême rebord de la poupe, d'une rame simplement posée sur une grêle pièce de bois taillée en chevalet, fait voler la galère, la dirige avec une habile témérité sur les étroits passages, tourne les obstacles, rase, franchit, esquive, jamais ne s'arrête, jamais ne heurte, et semble n'être, lui et sa gondole tout ensemble, que le plus agile dauphin de ces parages.

—*Rodolphe Töpffer.*

3. Celui-là ne vous fera grâce de rien; vous ne pourrez jamais l'apaiser; les flatteries mêmes l'irritent; la politesse lui semble de la pitié, une prévenance, une charité; il est humble à désespérer, susceptible à faire mal aux nerfs; on ne sait par quel mot le prendre. —Si vous le priez à diner, il vous répond: "Merci, non; je me rends justice, je suis trop maussade pour un convive." Si vous l'engagez à venir entendre des vers, de la musique: "Non, merci, dit-il; je suis un être trop obscur pour faire partie d'une réunion si brillante." Si vous lui proposez une partie de campagne: "Non, merci, répond-il; il faut de la gaieté dans ces sortes de plaisirs; invitez vos aimables, ils valent mieux que moi pour cela." Cet homme ne jouit de rien, n'est propre à rien; il est rongé de modestie, mais d'une affreuse modestie, d'une humilité hostile qui le met en garde contre tout le monde; c'est une lèpre imaginaire qui lui fait fuir ses semblables. Cette maladie est heureusement fort rare en ce pays, et nous n'en parlons que pour la constater.

—*Madame de Girardin.*

4. (*a*) son visage sec de médaille.

(*b*) une certaine nouvelle. une nouvelle certaine.

(*c*) je le fais d'habitude. je le fais par habitude.

(*d*) je l'ai fait parler. je lui ai fait parler.

(*e*) donner un poisson d'avril à quelqu' un.

(*f*) c'est bonnet blanc et blanc bonnet.

(*g*) c'est un sot en trois lettres.

(*h*) du train dont il va, il mangera son blé en herbe.

(*i*) Jean, rappelez-vous qu'aujourdhui je n'y suis pour personne.

HONOURS.

French.

Prose and Composition.

[Preliminary Honour Students to omit 2.]

1. Translate into French :

A book is essentially not a talked thing, but a written thing, and written not with the view of mere communication but of permanence. The book of talk is printed only because its author cannot speak to thousands of people at once; if he could, he would: the volume is mere multiplication of his voice. You cannot talk to your friend in India—if you could you would; you write instead—that is mere conveyance of voice.

But a book is written, not to multiply the voice merely, not to circulate it, but to preserve it. The author has something to say which he perceives to be true and useful, or helpfully beautiful. So far as he knows, no one has yet said it; so far as he knows, no one else can say it. He is bound to say it, clearly and melodiously if he may, clearly at all events. In the sum of his life he finds it to be the thing, or group of things, manifest to him; this the piece of true knowledge, or sight, which his share of sunshine and earth has permitted him to seize. He would fain set it down for ever, engrave it on rock if he could, saying : This is the best of me ; for the rest I ate, and drank, and slept, loved and hated, like another; my life was as the vapour, and is not; but this I saw and knew: this, if anything, is mine, is worth your memory. That is his writing; it is, in his small human way, and with whatever degree of true inspiration is in him, his inscription or scripture. That is a book. —*Ruskin.*

2. Translate into French :

For hours I lay there, listening to the wind and water; imagining—now that I heard shrieks out at sea, now that I distinctly heard the firing of signal guns, and now the fall of houses in the town. I got up several times and looked out, but could see nothing, except the reflection in the window-panes of the faint candle I had left burning, and of my own haggard face looking in at me from the black void.

At length my restlessness attained to such a pitch that I hurried on my clothes and went downstairs. In the large kitchen, where I

dimly saw bacon and ropes of onions hanging from the beams, the watchers were clustered together, in various attitudes, about a table, purposely moved away from the great chimney and brought near the door. —*Dickens.*

3. Write an essay in French on *one* of the following subjects :

1. The Arguments in Favour of War.
2. The Relation of Literature to the Progress of Society.
3. A Day in the Backwoods.
4. Knowledge is Virtue.

HONOURS.

French.

Preliminary I.

Translate into English :

(*a*) Le Comte. Je l'avoue entre nous, mon sang un peu trop chaud
S'est trop ému d'un mot, et l'a porté trop haut ;
Mais puisque c'en est fait, le coup est sans remède.
Don Arias. Qu'aux volontés du Roi ce grand courage cède:
Il y prend grande part, et son cœur irrité.
Agira contre vous de pleine autorité.
Aussi vous n'avez point de valable défense.
—*Le Cid* 351-357.

(*b*) Oreste. Quels démons, quels serpents traîne-t-elle après soi ?
Hé bien! filles d'enfer, vos mains sont-elles prêtes ?
Pour qui sont ces serpents qui sifflent sur vos têtes ?
A qui destinez-vous l'appareil qui vous suit ?
Venez-vous m'enlever dans l'eternelle nuit ?
Venez, à vos fureurs Oreste s'abandonne.
Mais non, retirez-vous, laissez faire Hermione:
L'ingrate mieux que vous saura me déchirer;
Et je lui porte enfin mon coeur à dévorer.
—*Andromaque* 1636-1644.

(*c*) Etre infatué de soi, et s'être fortement persuadé qu'on a beaucoup d'esprit, est un accident qui n'arrive guère qu'à celui qui n'en a point, ou qui en a peu: malheur pour lors à qui est exposé à l'entretien d'un tel personnage: combien de jolies phrases lui faudra-t-il essuyer! combien de ces mots aventuriers qui paraissent subitement, durent un temps, et que bientôt on ne revoit plus! S'il conte un nouvelle, c'est moins pour l'apprendre à ceux qui l'écoutent, que pour avoir le mérite de la dire, et de la dire bien: elle devient un roman entre ses mains: il fait penser les gens à sa manière, leur met en la bouche ses petites façons de parler, et les fait toujours parler longtemps. —*La Bruyère Caractères* v.

(*d*) Le premier était de ne recevoir jamais aucune chose pour vraie que je ne la connusse évidemment être telle; c'est-à-dire d'éviter soigneusement la précipitation et la prévention, et de ne comprendre rien de plus en mes jugements que ce qui se presenterait si clairement et si distinctement à mon esprit que je n'eusse aucune occasion de le mettre en doute.
—*Discours de la Méthode*, Part ii.

Discuss the value of this maxim.

HONOURS.

French.

Literature—Preliminary, II.

Translate into English.

(*a*) Mais voici qu'à présent le moment venu, cette hardiesse lui semblait extrême. L'idée seulement de le rencontrer, de le voir face à face au pied de ces marches la faisait trembler. Son cœur battait à se rompre....Et dire que, d'un moment à l'autre, cette porte en bas allait s'ouvrir,—avec le petit bruit grinçant qu'elle connaissait bien,—pour lui donner passage!

—*Pêcheur d'Island*, Chap. 6.

(*b*) Mais moi, quel changement! Frère, que te dirai-je?
Orphelin, par pitié nourri dans un collége
De science et d'orgueil, de moi, triste faveur!
Au lieu d'un ouvrier, on a fait un rêveur.
Tu sais, tu m'as connu: je jetais mes pensées
Et mes vœux vers le ciel en strophes insensées
J'opposais cent raisons à ton rire moqueur;
J'avais je ne sais quelle ambition au cœur.

—*Ruy Blas*, 297-304.

(*c*) Mais il faut dans mes mains remettre le coupable:
Le droit de le punir est un droit respectable;
C'est le devoir des rois: le glaive de Thémis,
Ce grand soutien du trône, à lui seul est commis:
A vous, comme à son peuple, il veut rendre justice.
Le sang des assassins est le vrai sacrifice
Qui doit de votre hymen ensanglanter l'autel.

—*Mérope*, 569-575.

(*d*) DORINE—Parlons sans nous fâcher, monsieur, je vous supplie.
Vous moquez-vous des gens d'avoir fait ce complot?
Votre fille n'est point l'affaire d'un bigot:
Il a d'autres emplois auxquels il faut qu'il pense.
Et puis, que vous apporte une telle alliance?
A quel sujet aller, avec tout votre bien,
Chosisir un gendre gueux?...

—*Tartuffe*, Act II., Sc II.

HONOURS.

French.

Literature II.

[Only 5 questions to be attempted.]

1. Attempt some characterisation of Racine's plots, with particular reference to Andromaque.

2. State briefly what you know of Rabelais, Les Trouvères, George de Scudéry, Gil Blas, Musset, La Rochefoucauld.

3. Wherein lies the genius of La Fontaine?

4. What was V. Hugo's purpose in writing "Les Miserables?"

5. Why have the French produced so many great historians?

6. Attempt a brief study of Balzac—his methods and his purpose.

[Alternative questions for Preliminary Honour Students.]

7. Comment on Molière's treatment of contemporary life in Tartuffe.

8. A short study of Mérope *or* of Le Pêcheur d'Islande.

HONOURS.

French.

Honours I.

[Only 5 questions to be attempted at the most.]

1. State briefly what was Aristotle's conception of tragedy.

2. Discuss La Bruyère as a moralist.

3. Give a study of the contrasts between Classicism and Romanticism with special reference to the plays you have more particularly studied.

4. What are the outstanding characteristics of the literature of the xi.-xiv. Centuries?

5. What is the position of the xvi. Century in the development of French Literature?

6. Give a brief sketch of the changes made by the Romanticists in versification, with the reasons for those changes.

7. What is the problem of "Ruy Blas"? How is it treated, and with what success?

HONOURS.

French.

Intermediate I.

1. Translate into English:

(*a*) C'était une assez vaste enceinte à peine éclairée, tantôt pleine de rumeur, tantôt pleine de silence, où tout l'appareil d'un procès criminel se développait avec sa gravité mesquine et lugubre au milieu de la foule.

A un bout de la salle, celui où il se trouvait, des juges à l'air distrait, en robe usée, se rongeant les ongles ou fermant les paupières; à l'autre bout, une foule en haillons; des avocats dans toutes sortes d'attitudes; des soldats au visage honnête et dur; de vieilles boiseries tachées, un plafond sale, des tables couvertes d'une serge plutôt jaune que verte, des portes noircies par les mains.

—*Les Misérables*, Part i., Book vii.

(*b*) Au moindre coup de talon sonnant derrière les siens, i s'arrêtait attentivement devant les photographies étalées, feuilletait un livre anglais ou allemand pour obliger le policier à passer devant lui; ou bien il se retournait brusquement, dévisageait sous le nez avec des yeux féroces une grosse fille d'auberge allant aux provisions, ou quelque touriste inoffensif, vieux Pruneau de table d'hôte, qui descendait du trottoir, épouvanté, le prenant pour un fou.

—*Tartarin sur les Alpes*, Ch. viii.

(*c*) CURIACE. Que les pleurs d'une amante ont de puissants discours!
Et qu'un bel oeil est fort avec un tel secours!
Que mon coeur s'attendrit à cette triste vue!
Ma constance contre elle à regret s'évertue.
N'attaquez plus ma gloire avec tant de douleurs,
Et laissez-moi sauver ma vertu de vos pleurs;
Je sens qu'elle chancelle, et défend mal la place:
Plus je suis votre amant, moins je suis Curiace.

—*Horace* 577-584.

(*d*) Que ne lui laissez-vous finir sa période?
Je suais sang et eau, pour voir si du Japon
Il viendrait à bon port au fait de son chapon,
Et vous l'interrompez par un discours frivole.
Parlez donc, avocat.
PETIT JEAN. J'ai perdu la parole.

—*Les Plaideurs* 688-692.

HONOURS.

French.

Literature.—Intermediate and Final. II.

2. Translate into English :

(*a*) PYRRHUS—Et le puis-je, Madame? Ah! que vous me gênez!
Comment lui rendre un cœur que vous me retenez!
Je sais que de mes vœux on lui promit l'empire;
Je sais que pour régner elle vint dans l'Epire:
Le sort vous y voulut l'une et l'autre amener,
Vous, pour porter des fers, elle, pour en donner.
Cependant ai-je pris quelque soin de lui plaire?
Et ne dirait-on pas, en voyant au contraire
Vos charmes tout-puissants, et les siens dédaignés,
Qu'elle est ici captive, et que vous y regnez?
Ah! qu'un seul des soupirs que mon cœur vous envoie,
S'il s'échappait vers elle, porterait de joie!

ANDROMAQUE, 343-354.

(*b*) Travaillez à loisir, quelque ordre qui vous presse,
Et ne vous piquez point d'une folle vitesse:
Un style si rapide, et qui court en rimant,
Marque moins trop d'esprit que peu de jugement.
J'aime mieux un ruisseau qui, sur la molle arène,
Dans un pré plein de fleurs lentement se promène,
Qu'un torrent débordé qui, d'un cours orageux,
Roule, de gravier, sur un terrain fangeux.
Hâtez-vous lentement, et, sans perdre courage.

L'ART POÉTIQUE, i., 153-161.

(*c*) LE COMTE.—A la bonne heure! Sur ce ton, monsieur... Mais je crains qu'on ne soit aux écoutes.

BARTHOLO.—Eh! que voulez-vous? Tous mes valets sont sur les dents! Rosine, enfermée de fureur! Le diable est entré chez moi. Je vais encore m'assurer... (*Il va ouvrir doucement la porte de Rosine.*)

LE COMTE, à *part.*—Je me suis enferré de dépit... Garder la lettre à present! il faudra m'enfuir; autant vaudrait n'être pas venu.

LE BARBIER DE SÉVILLE, iii., sc. 2.

HONOURS.

French.

Literature—Intermediate and Final. III.

1. Translate into English :

Quelque radicale qu'ait été la Révolution, elle a cependant beaucoup moins innové qu'on ne le suppose généralement: je le montrerai plus tard. Ce qu'il est vrai de dire d'elle, c'est qu'elle a entièrement détruit ou est en train de détruire (car elle dure encore) tout ce qui, dans l'ancienne société, découlait des institutions aristocratiques et féodales, tout ce qui s'y rattachait en quelque manière, tout ce qui en portait, à quelque degré que ce fût, la *moindre* empreinte. Elle n'a conservé de l'ancien monde que ce qui avait toujours été étranger à ces institutions ou pouvait exister sans elles.

Attempt to briefly characterise what was destroyed in society and politics.

2. Translate into English :

Quand je cherche à démêler les différents effets que l'irréligion produisit alors en France, je trouve que ce fut bien plus en déréglant les esprits qu'en dégradant les cœurs, ou même en corrompant les mœurs, qu'elle disposa les hommes de ce temps-là à se porter à des extrémités si singulières.

Lorsque la religion déserta les âmes, elle ne les laissa pas, ainsi que cela arrive souvent, vides et débilitées; elles se trouvèrent momentanément remplies par des sentiments et des idées qui tinrent pour un temps sa place et ne leur permirent pas d'abord de s'affaisser.

What reasons does De Tocqueville give for the strong attack that was made on the Church?

3. What was the centralisation under L'Ancien Régime? Show briefly how it worked, and particularly how it prepared the way for the Revolution.

4. Translate into English :

Ces grands corps sont trop malaisés à relever étant abattus ou même à retenir étant ébranlés, et leurs chutes ne peuvent être que

très-rudes. Puis, pour leurs imperfections, s'ils en ont, comme la seule diversité qui est entre eux suffit pour assurer que plusieurs en ont, l'usage les a sans doute fort adoucies, et même il en a évité ou corrigé insensiblement quantité auxquelles on ne pourrait si bien pourvoir par prudence.

5. Show briefly how Descartes obtained a test of truth, and discuss its validity.

6. What is the "Inventum Mirabile?" "Cartesian doubt?"

7. How far is there any historical support for Rousseau's theory of a social contract and to what extent does it contain elements of truth as a theory of society?

8. In what way does Rousseau stand apart from the other political theorists of his time?

9. Translate into English:

Mais je me trompe en disant une république chrétienne; chacun de ces deux mots exclut l'autre. Le christianisme ne prêche que servitude et dépendance. Son esprit est trop favorable à la tyrannie pour qu'elle n'en profite pas toujours. Les vrais chrétiens sont faits pour être esclaves; ils le savent et ne s'en émeuvent guère; cette courte vie a trop peu de prix à leurs yeux.

Les troupes chrétiennes sont excellentes, nous dit-on. Je le nie: qu'on m'en montre de telles. Quant à moi, je ne connois point de troupes chrétiennes. On me citera les croisades. Sans disputer sur la valeur des croisés, je remarquerai que, bien loin d'être des chrétiens, c'étoient des soldats du prêtre, c'étoient des citoyens de l'Église: ils se battoient pour son pays spirituel, qu'elle avoit rendu temporel on ne sait comment. —*Le Contrat Social IV. 8.*

FINAL HONOURS.

French.

Philology.

1. Reproduisez en prose moderne :

Ço sent Rollanz la vedude at perdude,
Met sei sor piez, quant qu'il poet s'esvertudet;
En son visage sa color at perdude.
Dedevant lui at une piédre brune;
Dis cols i fiert par doel e par rancune,
Croist li aciers, ne fraint ne ne s'esgruignet;
Et dist li cuens: "Sainte Marie, aiude !
E ! Durendal, bone, si mare fustes !
Quant jo n'ai prot, de vos nen ai meins cure."

2. Traduisez en anglais :

Li cuens l'entent del mangier ou il sist,
Lors a huchié le seneschal Remi;
"A cèle porte ai un malade oï.
Va, si li porte et del pain et del vin,
Et de la char, por Deu qui ne mentit,
Que Dex me rende mon compaignon Ami,
O tels novèles m'en apreigne a oïr,
Par quoi je saiche s'il est o morz o vis !"
Li seneschals prent le pain et le vin,
Si en avale les degrez marberins,
Al conte Ami le porte.

3. Traduisez en anglais :

Lues que li tans fu trespassez,
Vi sor le pin toz amassez
Oisiax (s'est, qui croire le vuelle),
Qu'il n'i paroit branche ne fuelle
Que tot ne fust covert d'oisiax.
S'an estoit li arbres plus biax.
Doucement li oisel chantoient,
Si que molt bien s'antracordoient;
Et divers chanz chantoit chascuns,
C'onques ce que chantoit li uns
A l'autre chanter n'i oï.

4. Discutez l'étymologie des mots suivants :

Charte, carte, foi, temps, ce, chétif, captif.

[Trois des questions suivantes sont à essayer.]

5. Prouvez que la marche de la langue et celle de l'histoire politique ont été parallèles.

6. Expliquez comment le latin vulgaire a pu se développer en les *six* langues romanes.

7. Quelles sont les différences profondes qui séparent la conjugaison française des conjugaisons latines? Distinguez entre les verbes *forts* et les verbes *faibles*.

8. Prouvez que le quatorzième siècle est le point de partage entre l'ancienne langue et la nouvelle.

9. Quelles sont les différences principales entre le Vieux Français et le Français Moderne.

Queen's University Examinations: April, 1905.

HONOURS.

French.

Literature—Final I.

1. Translate into English :

(*a*) Ce sont ceux qui donnent le branle à la réputation dans Paris, et vous savez qu'il y en a tel dont il ne faut que la seule fréquentation pour vous donner bruit de connaisseuse, quand il n'y aurait rien autre chose que cela. Mais pour moi, ce que je considère particulièrement, c'est que, par le moyen de ces visites spirituelles, on est instruite de cent choses qu'il faut savoir de nécessité et qui sont de l'essence d'un bel esprit.

—*Les Précieuses Ridicules*, Scene ix.

(*b*) Et, d'abord, cen'est pas de bonne compagnie:
Cela sent son pédant et son petit génie
Que de faire sur tout un bruit démesuré.
Un méchant million, plus ou moins dévoré,
Voilà-t-il pas de quoi pousser des cris sinistres!
Mon cher, les grands seigneurs ne sont pas de vos cuistres.
Ils vivent largement. Je parle sans phébus.
Le bel air que celui d'un redresseur d'abus
Toujours bouffi d'orgueil et rouge de colère!

—*Ruy Blas*, 1357-1365.

(*c*) Le chat et le renard, comme beaux petits saints,
S'en alloient en pèlerinage.
C'étoient deux vrais tartufs, deux archipatelins,
Deux francs patte-pelus, qui, des frais du voyage,
Croquant mainte volaille, escroquant maint fromage,
S'indemnisoient à qui mieux mieux.
Le chemin étant long, et partant ennuyeux,
Pour l'accourcir ils disputèrent.
La dispute est d'un grand secours:
Sans elle on dormiroit toujours.
Nos pèlerins s'égosillèrent. —*Fables* ix. 14.

(*d*) ÉGISTHE. Hélas! sur son visage
J'entrevois de la mort la douloureuse image :
Que j'en suis attendri! j'aurais voulu cent fois
Racheter de mon sang l'état où je la vois.
MÉROPE. Le cruel! à quel point on l'instruisit à feindre!
Il m'arrache la vie, et semble encor me plaindre!
(Elle se jette dans les bras d'Isménie.)

—*Mérope* 701-706.

HONOURS.

English—Anglo-Saxon.

1. *Tha* wear*th* se cyningc Oswold swi*th*e ælmesgeorn and eadmod on *th*eawum and on eallum *th*ingum cystig, and man arærde cyrcan on his rice geond eall and mynsterlice geset*t*nyssa mid micelre geornfulnysse.

Hit gelamp on sumne sæl *th*æt hi sæton ætgædere Oswold and Aidan on *th*am halgan easterdæge; *th*a bær man *th*am cyninge cynelice *th*enunga on anum slfrenan disce; and sona *th*a inn eode an *th*æs cyninges *th*egna *th*e his ælmyssan bewiste, and sæde *th*æt fela *th*earfan sætan geond *th*a stræt gehwanon cumene to *th*æes cyninges ælmyssan. *Tha* sende se cyning sona *th*am *th*earfum *th*one sylfrenan disc mid sande mid ealle, and het toceorfan *th*one disc, and syllan *th*am *th*earfum heora ælcum his dæl, and man dyde *th*a swa. *Tha* genam Aidanus se æ*th*ela bisceop *th*æes cyninges swy*th*ran hand mid swithlicre blysse, and clypode mid geleafan, *th*us cwe*th*ende him to: 'Ne forrotige on brosnunge *th*eos gebletsode swy*th*re hand.' And him eac swa geeode, swa swa Aidanus him bæd, *th*æt his sw*i**th*re hand is gesundfu*l* o*th* *th*is.

(*a*) Translate.

(*b*) Parse *theawum*, *sæton*, *thearfan*, *syllan*, *forrotige* and give the principal parts of the verbs.

2. *Tha* andswarode he and cwæ*th*: 'Mine bro*th*ro *th*a leofan, ic eom swi*th*e bli*th*omod to eow and to eallum Godes monnum.' And he swa wæs hine getrymmende mid *th*y heofonlican wegneste, and him o*th*res lifes in*n*gang gearwade. Da gyt he frægn hu neh *th*ære tide wære *th*ætte *th*a bro*th*or arisan sceoldon, and Godes folc læran, and heora uhtsang singan? Andswarodon hi: 'Nis hit feo*r**r* to *th*on.' Cwæth he: 'Tela, utan we wel *th*ære tide bidan;' and *th*a him gebæd, and hine gesenade mid Cristes rodetacne, and his heafod onhylde to *th*am bolstre, and medmycel fæc onslæpte, and swa mid stillnesse his lif geendade.

Translate.

3. (*a*) Give the comparative and superlative forms of the following adjectives: *god, lang, neah, yfel micel.* (*b*) Conjugate throughout *macian* (to make).

4. Give a four-column analysis of the following words explaining fully all the processes of change, *son, slew, bishop, fee, Welsh, knight, enough.*

5. Translate the following sentences into Anglo-Saxon:

(*a*) Then the sea-rover Hœsten told him the story of the battle and ordered him to bring two thousand men to the ships.

(*b*) At that time a terrible voice from heaven called to him and said: Thy kingdom will depart from thee and thy dwelling will be with wild beasts until thou knowest that the high God ruleth the kingdoms of men.

HONOURS (INTERMEDIATE AND FINAL).

English.

First Paper.

1. 'Come here, thou worthy of a world of praise,
That dost so high the Grecian glory raise,
Ulysses! stay thy ship, and that song hear
That none past ever but it bent his ear,
And left him ravish'd, and instructed more
By us, than any ever heard before.
For we know all things whatsoever were
In wide Troy laboured: whatsoever these
The Grecians and the Trojans both sustain'd
By those high issues that the Gods ordain'd.
And whatsoever all the earth can show
T'inform a knowledge of desert, we know.'
* * * * * * *

When roving on without the reach of sound,
My friends unstopped their ears and me unbound,
And that isle quite we quitted. But again
Fresh fears employ'd us. I beheld a main
Of mighty billows, and a smoke ascend,
A horrid murmur hearing. Every friend
Astonish'd sat; from hand his oar
Fell quite forsaken; with the dismal roar
Were all things there made echoes.

Chapman's Transal. of the Odyssey.

Illustrate from this passage Chapman's manner of wielding the rhymed couplet. Compare the rhythmical qualities of the passage with those of the *Endymion* or the *Lamia*.

2. That part of it, again, which so much occupies the attention of philanthropists at present,—the part which gives all its energies to organising itself, through trades' unions and other means, so as to constitute, first, a great working-class power independent of the middle and aristocratic classes, and then, by dint of numbers, give the law to them and itself reign absolutely,—this lively and promising part must also, according to our definition, go with the Philistines; because it is its class and its class instinct which it seeks to affirm, its ordinary self not its best self; and it is a

machinery, an indus rial machinery, and power and pre-eminence and other external goods, which fill its throghts, and not an inward perfection. It is wholly occupied, according to Plato's subtle expression, with the things of itself and not its real self, with the things of the State and not the real State. But that last portion, lastly, of the working-class which, raw and half-developed, has long lain half-hidden amidst its poverty and squalor, and is now issuing from its hiding-place to assert an Englishman's heaven-born privilege of doing as he likes, and is beginning to perplex us by marching where it likes, meeting where it likes, bawling what it likes, to this vast residuum we may with great propriety give the name of *Populace*.

Thus we have got three distinct terms, *Barbarians*, *Philistines*, *Populace*, to denote roughly the three great classes into which our society is divided; and though this humble attempt at a scientific nomenclature falls, no doubt, very far short in precision of what might be required from a writer equipped with a complete and coherent philosophy, yet, from a notoriously unsystematic and unpretending writer, it will, I trust, be accepted as sufficient.

(*a*) Explain the purport of this criticism.

(*b*) Illustrate from this passage the qualities of thought and (2) the qualities of style shown by the writer.

3. Many were tears and great was perplexity. Nor had availed availed then all his prayers and all his device. But much was spoken now, between Adam and Elspie: companions were they hourly: Much by Elspie to Adam, inquiring, anxiously seeking.

Write the above in hexameter lines, as Clough has them, and scan and criticise them.

HONOURS.

English.

SECOND PAPER.

I.

[The whole of the Section 1 and one question from each of the other two Sections.]

1. Give brief precise characterisations of the style (1) of Gibbon, (2) of Newman.

2. What examples and illustrations does Arnold give of the *grand style in severity* and the *grand style in simplicity*. Give examples of your own and show precisely how they illustrate your opinion.

II.

3. Compare Wordsworth's poetic interpretation of nature with that found in Greek idyllic poetry. Define the character of Keats's poetry in the same respect.

4. Give an account of any three of the following poems or works, showing (1) their general meaning, (2) how they illustrate the moral and intellectual qualities of the author:—The Epistle of Karshish, Youth and Art, Ruskin's Geneva, Character of the Happy Warrior, Laodamia.

III.

5. Mention from what poems the following extracts are taken, and explain their meaning in relation to the context:—

(*a*) Therefore the wise pray for thee, though the freight
Of thy offences be a heavy weight:
Oh grief that Earth's best hopes rest all with Thee!

(*b*) I entreated that henceforth
He would not linger in the public ways,
But ask for timely furtherance and help
Such as his state required. At this reproof
With the same ghastly mildness in his look,
He said, "My trust is in the God of Heaven,
And in the eye of him who passes me!"

(*c*) Not on the breath of popular applause,
But through dependence on the sacred laws
Framed in the schools where Wisdom dwelt retired.

(*d*) I'll ask you, I or he
Which in our two lives realizes most?
Much, he imagined—somewhat, I possess.
He had the imagination; stick to that!
Let him say, "In the face of my soul's works
"Your world is worthless and I touch it not
"Lest I should wrong them"—I'll withdraw my plea.

(*e*) I was a poet too; but modern taste
Is so refined, and delicate and chaste,
That verse, whatever fire the fancy warms,
Without a creamy smoothness has no charms.

FINAL HONOURS.

English.

THIRD PAPER.

I.

1. (*a*) Give a critical estimate of Shelley's *Adonais*. Write a special note on Shelley's qualities as a metrist, illustrating your statements by quotations from or references to *Hymn of Pan*, *Alastor*, *Adonais*.

(*b*) Write an account of Coleridge's life and give a critical estimate of his *Hymn on the Vale of Chamouni*. Compare the feeling for nature shown in that poem with that which is characteristic of Wordsworth.

II.

2. (*a*) State the chief distinctions which Ruskin marks (1) in the use of the Pathetic Fallacy, (2) on the subject of *False* and *True Finish* in art. Give and consider Ruskin's critical remarks on the following passages:

(1) The spendthrift crocus, bursting through the mould
Naked and shivering, with his cup of gold.

(2) Whose changing mound and foam that passed away,
Might mock the eye that questioned where I lay.

(3) O, say what angry power Elpenor led
To glide in shades, and wander with the dead?
How could thy soul, by realms and seas disjoined,
Outfly the nimble sail, and leave the lagging wind?

3. Give an estimate of Scott as a novelist, illustrating your remarks by references to *Redgauntlet*.

III.

4. But men might axe me, why so
I may not slepe, and what me is?
But natheles, who aske this
Leseth his asking trewely.
My-selven can not telle why
The soth; trewely, as I gesse,
I holde hit [moot] be a siknesse
That I have suffred this eight yere,
And yet my bote is never the nere;
Ther is phisicien but oon.
That may me hele; but that is doon.
Passe we over until eft;
That will not be, moot nede be left;
Our first matere is good to kepe.

(*a*) From what poem is this extract taken? Comment on the sentiment expressed and its significance in this kind of poetry.

(*b*) Put the passage into modern English, so as to bring out clearly the sense of every word.

(*c*) Explain precisely the forms of the following words: *Axe, slepe, leseth, my-selven, nere, oon, moot, matere.*

(*d*) Compare Chaucer's handling of the octosyllabic couplet with Scott's.

(*e*) Write a page on the influence which each of the following writers exercised in Chaucer's work: *Machault, Jean de Meung, Dante.*

(*f*) Illustrate Chaucer's attitude to chivalry and its manners and ideals from his earlier and later poems.

HONOURS.

History.

FIRST PAPER.

1. Explain the terms Twelf-hynd Man, Twy-hynd and Six-hynd Man. Mention any instance in which the wehrgeld of the Franks differed from that of the Anglo-Saxons.

2. Trace the growth of the idea of Royal jurisdiction in England. How was it affected by the change of Folcland to Bocland?

3. What were the two fundamental principles of Feudalism? Trace their growth in England.

4. Stubbs says "that the reign of William I. was of a transitional character," and adds: "The constitutional effects of the conquest are not worked out in William's reign, but in that of Henry I." Explain this briefly.

5. The Curia Regis may be regarded as having two sides. Trace the development of these and point out any similar development in the French Curia Regis.

6. "The Assize of Clarendon is the most important document in the nature of law or edict that has appeared since the conquest." Wherein consists its importance? Give a brief outline of its contents.

HONOURS.

History.

SECOND PAPER.

1. State in general terms the Provisions of Oxford. What were the circumstances of the Agreement, and under what circumstances were they annulled?

2. In regard to the character of the reign of Edward I. it is said: "The temper of the period lies midway between the prolific premature life of the early thirteenth century and the splendid formal hollowness of the fourteenth." And it is added: "In every branch of administration the process of definition goes on, almost uniformly." Explain Stubb's view.

3. In the writ for the Conservation of the Peace in the reign of Henry III. it is written:

Provisum est etiam quod singuli vicecomites una cum duobus militibus ad hoc ipecialiter assignatis, circumeant comitatus suos de hundredo in hundredum, et civitates et burgos, et convenire faciant coram eis in singulis hundredis, civitatibus et burgis, cives, burgenses, libere tenentes, villanos et alios aetatis quindecim annorum usque ad aetatem sexaginta annorum, et eosdem faciant omnes jurare ad arma, secuedum quantitatem terrarum et catallorum suorum.

Explain *libere tenentes, villanos, faciant, jurare ad arma, secundum quantitatem terrarum et catallorum.* Mention some instances of this last. What does the term *villanos* in this connection imply?

4. State briefly the dangers and infirmities of representative government as defined by Mill.

5. What does Rosseau mean by individual sovereignty? State Guizon's views of the nature of rightful sovereignty.

HONOURS.

History.

THIRD PAPER.

1. Hallam mentions five checks or limits of the Royal Prerogative. What are these? Give examples of their action. How were they sometimes evaded?

2. What were the political effects of the confiscation of the Monasteries? What distinction does Hallam make between the rights of individual and of corporate property?

3. How did the Acts of Uniformity and Supremacy affect the Catholic Bishops in the House of Peers?

4. How were the Puritans affected by the Act of Uniformity?

5. The first Parliament of the reign of James I. was convoked by an irregular proclamation. What was its character? State any questions which arose out of it.

6. State briefly the terms of the Grand Remonstrance (1641.) What was the conduct of the King in regard to it?

7. On what ground did Pym seek to establish the charge of High Treason against the Earl of Strafford? Criticise Pym's charge according to the statute of Edward III. and Lord Byron's reading of it.

8. Give a short account of the Irish Pale and of Poyning's Law.

HONOURS.

History.

FOURTH PAPER.

1. At the time of the accession of George III. what were the sources of the influence of the Crown and what restrictions on the personal influence?

2. State the question of Life Peerage as it grew out of the case of Lord Wensleydale.

3. What was the position of the Scotch Peers as determined by the Act of Union? What changes have taken place since? What is the position of the Irish Peers?

4. Point out the merits and demerits of Party Government.

5. What were the effects of the Reform Bill on the organization of parties?

6. Discuss the Quebec Act of 1774. What motives dictated it?

7. What are the constitutional relations between Great Britain and Canada under the British North American Act?

8. What is the character of the executive in the United States? How does it satisfy the conditions laid down by Mill as essential to an ideal executive?

Philosophy.

FIRST PAPER.

1. Are there indications of an advance in Plato's thought when the *Meno* is compared with the *Protagoras?*

2. What is the relation of "conceptions" to "ideas," as set forth in the *Phaedo?* Is the view there indicated compatible with the ordinary view of the ideal theory?

3. How far does Spinoza succeed in reducing nature and mind to the unity of the absolute?

4. What leads Spinoza to deny that the world is a teleological system? Is his denial ultimately justifiable?

5. How does Leibnitz explain the resistance or "inertia" of bodies? Criticise his view.

6. Explain and examine the doctrine that every monad "represents" the whole world.

HONOURS.

Philosophy.

SECOND PAPER.

1. What are the relations of Dogmatism, Scepticism and Criticism?

2. "How should our faculty of knowledge be aroused to activity but by objects which act upon our senses?" What ambiguity is there in Kant's use of the term "experience?" Compare the theory of knowledge here indicated with the doctrines of Locke and Leibnitz.

3. "In the *Aesthetic* Kant treats of perception as if it involved the consciousness of an object independently of any activity of thought." Is the same view taken in the *Anlytic?* If not, how do you account for the difference?

4. How are the syntheses of apprehension, reproduction, and recognition distinguished from, and related to, one another?

5. State the main points in Kant's proof of the principle of causality.

6. "The *positive* division of objects into phenomena and noumena is inadmissible." What is the view to which Kant here objects? State his own view.

HONOURS.

Philosophy.

THIRD PAPER.

1. "The same evolution of thought which is exhibited in the history of philosophy is presented in the system of philosophy itself." Is this view of Hegel open to the objection that the temporal is not identical with the logical order?

2. "Kant regards the content of experience as phenomenal, not because the categories are themselves finite, but because they are derived from self-consciousness." What is the objection to Kant here indicated? Estimate its value.

3. "An empirical logic is a strange science; it is an irrational knowledge of the rational." Explain, in connection with this criticism, the difference between formal and speculative logic.

4. "Judgment is the combination of two conceptions." What objections does Hegel make to this doctrine?

5. Give a summary of the dialectical process of the Immediate Judgment (das Urtheil des Daseins).

6. Characterize the Syllogisms of Allness, Induction, and Analogy. Show how the last developes into the Syllogism of Necessity (der Schloss der Nothwendigkeit).

HONOURS.

Philosophy.

SIXTH PAPER.

1. Can a criterion of Reality be derived from the principle of self-consistency?

2. "Error and evil are no disproof of our absolute experience so long as we merely fail to see how in detail it comprehends them." Is this a defensible position? If not, how would you deal with the problems of error and evil?

3. How does Bradley dispose of "Solipsism?" Is his treatment satisfactory?

4. "The physical world is phenomenal throughout." Is this true in Bradley's sense? If not, in what sense is it true?

5. Estimate the value of Bradley's treatment of the relations of soul and body.

6. "Whereas in perceptive experience the sensible object carries its own reality with it, in practice the wanted object is one to which existence has yet to be given." Do you accept the contrast here drawn by Green between theory and practice?

PRELIMINARY HONOURS.

Political Science.

FIRST PAPER.

1. Explain the nature and function of kinship in the organization of ancient society.

2. Explain, from the point of view of legal and political institutions, the relation of the Roman Government to the outlying portions of the Empire.

3. Discuss, from the point of view of the essentials of democratic government, the development of the powers of the British Cabinet.

4. What constitutes public opinion? What are its chief organs? In what lines is it most influential?

5. Account for the first form which municipal institutions assumed in Ontario.

6. Illustrate from the Baldwin Municipal Act the theory of government which prevailed in Canada about 1850.

PRELIMINARY HONOURS.

Political Science.

SECOND PAPER.

1. To what extent is the question of population an economic one? How far is there an economic remedy for pauperism?

2. What is included in the increase of a nation's capital? Consider whether the whole capital of a nation can be said to have a money value.

3. Consider carefully the mutual relations of profit and interest.

4. What are the chief economic and legal advantages to be derived from the formation of corporations?

5. Distinguish corporations for the collecting of capital from corporations for the concrete employment of capital, and show their relations to one another.

6. Distinguish and relate stocks and bonds, and outline the functions of a trust company.

FINAL HONOURS.

Political Science.

FIRST PAPER.

1. What is essential to the unity of a nation? How will it harmonize with the rights of minorities?

2. "The right of reform is a necessary expression of the vitality of a State. If this right is resisted the development of the nation is denied, and occasion is given for revolution."—Bluntschli. Discuss this with reference to sovereignty, and illustrate from the condition of Russia.

3. Discuss, from the point of view of the essentials of democratic government, the development of the powers of the British Cabinet.

4. What constitutes public opinion? What are its chief organs? In what lines is it most influential?

5. Illustrate from the Baldwin Municipal Act the theory of government which prevailed in Canada about 1850.

6. What was the ground upon which preferential trade within the British Empire was advocated by such writers as Colebrooke after the peace of 1815? How does it compare with present arguments for preferential trade?

FINAL HONOURS.

Political Science.

SECOND PAPER.

1. In how far does the Canadian system of preferential trade realize Adam Smith's conception of the natural effects of preferential treaties of commerce?

2. Consider Mill's treatment of the influence of the moral and intellectual qualities of a people upon their economic productiveness.

3. "The value of a thing in any place, depends on the cost of its acquisition in that place; which, in the case of an imported article, means the cost of production of the thing which is exported to pay for it."—Mill. Examine this theory in the light of present international trade.

4. Give a brief account of the condition of Political Economy before the publication of *The Wealth of Nations.*

5. Compare the purposes and methods of the earlier and later forms of Socialism.

6. Consider the validity of the positive features of Russian Nihilism.

FINAL HONOURS.

Political Science.

THIRD PAPER.

1. To what extent is the question of population an economic one? How far is there an economic remedy for pauperism?

2. Analyze carefully the ideas involved in the law of diminishing returns, and indicate the range of its application.

3. Distinguish corporations for the collecting of capital from corporations for the concrete employment of capital, and show their relations to one another.

4. Distinguish and relate stocks and bonds. Outline the functions of a trust company.

5. How has legislation affected wages at different periods of industrial development?

6. How far have Wells' forecasts as to the future prospects of wheat and cotton been verified; and wherein and for what reason, have they broken down?

FINAL HONOURS.

Political Science.

FOURTH PAPER.

1. Trace the development of the general property tax, and account for its defects under present economic and political conditions.

2. Discuss, on theoretical and practical grounds, gross and net earnings as a basis for taxation.

3. Compare, as to character and basis, local improvement taxes, school taxes, and general civic taxes.

4. Discuss the quantity theory of prices.

5. What are the chief factors in foreign exchange? Explain their influence or operation.

6. Compare the chief mediaeval economic relations with those of succeeding periods in which capital came to be an important factor in economic and social life.

FINAL HONOURS.

Political Science.

FIFTH PAPER.

1. Account for the special development of the liberties of women under Roman Law.

2. Compare the influence of Roman Law upon politics, with its influence upon ethics.

3. Discuss the origin and nature of rights "in personam."

4. Explain the nature of the State's position as a juristic person. What has led to the increased importance, of late years, of this department of jurisprudence?

5. "Thus everything in our political life tends to hide from us that there is anything wiser than our ordinary selves, and to prevent our getting the notion of a paramount right reason." Explain Arnold's full meaning in this passage, and consider its application to Canadian political life.

6. Discuss the chief points in Carlyle's conception of democracy.

HONOURS.

Modern Geometry.

1. (*a*) Construct an isosceles triangle with each base angle double the vertical angle.

(*b*) Show how to construct geometrically an angle of 3°.

2. (*a*) Prove $\Sigma(a.AP^2)=\Sigma(a.AO^2)+\Sigma(a)OP^2$.

(*b*) Find the locus of P when $\Sigma(a.AP^2)=k^2$, a constant.

3. If any point be joined to the vertices of a triangle the lines through the point perpendicular to these joins meet the opposite sides of the triangle collinearly.

4. (a) From any point O, on the circumcircle of a triangle, perpendiculars are drawn to the sides. Prove that the feet of these perpendiculars are in line.

(*b*) State the result as a theorem when the whole figure of (*a*) is inverted with O as centre.

5. If ABC is a triangle and L,M,N corresponding sides of its polar reciprocal, and if T be tangent to the polar circle at P, and AT be the perpendicular from A to T, etc., show that AT. BT. CT=k. PL. PM. PN where PL is $\perp$ to L, etc., and K is constant; and find the value of k.

6. Prove that two circles are coaxal with their circles of similitude and anti-similitude, and show what changes occur in the system when inverted with respect to the circle of anti-similitude.

7. Prove that the incircle and the excircles of a triangle can be touched by a fifth circle.

8. Show that 6 points on a circle determine 60 pascals, and write (*a*) four hexagrams of which the pascals are concurrent, and (*b*) three other hexagrams of which the pascals are concurrent.

9. (*a*) Show how to find the double points for two homographic systems on a common axis.

(*b*) In a given square inscribe a quadrangle with its sides passing through 4 given points.

HONOURS.

Trigonometry I.

1. (*a*) Find an expression for all angles having the same tangent.

(*b*) Draw the graph of the tangent and of the secant.

2. (*a*) Prove that $\sin A + \sin B = 2\sin\frac{1}{2}(A+B)\cos\frac{1}{2}(A-B)$.

(*b*) Deduce the relation $\sin n\theta = 2\sin(n-1)\theta\cos\theta - \sin(n-2)\theta$.

(*c*) From (*b*) show that $\cos\theta + \cos 2\theta + \ldots \cos n\theta = \sin\frac{n}{2}\theta \cdot \cos\frac{n+1}{2}\theta / \sin\frac{1}{2}\theta$.

3. Show that

$$\sin^3\theta - \cos^3\theta = \frac{1}{2\sqrt{2}}\{3\sin(\theta - \tfrac{\pi}{4}) - \cos(3\theta - \tfrac{\pi}{4})\}.$$

4. If p, P denote the perimeters of an inscribed and a circumscribed regular polygon of n sides, and p', P′ of the corresponding polygons of $2n$ sides, show that $P' = 2Pp/(P+p)$, and $p' = \sqrt{p\,P'}$.

5. In any parallelogram show that $DD'\cos w = a^2 - b^2$; where D, D′ are diagonals and w is the angle between them.

6. Show that the area of the pedal triangle of the triangle A B C is $\frac{1}{2}R^2 \sin 2A \sin 2B \sin 2C$.

7. If $ax - bx^2 + cx^3 - dx^4 \ldots = \tan^{-1}\dfrac{x}{1-x}$, show that $ax + bx^2 + cx^3 + dx^4 + \ldots = \tan^{-1}\dfrac{x}{1+x}$, and find the resulting series for $\tan^{-1} 2x^2$ and for $\tan^{-1} 2x/(1-2x^2)$.

HONOURS.

Algebra I.

1. (*a*) If fx be divided by $x-a$ show that the remainder is fa.

(*b*) Express $x^5+15x^4+90x^3+270x^2+405x+241$ as a function of z where $z=x+3$.

2. Show that $x^3-2x^2+x-1=0$ has one real root, and find its value to 4 decimals.

3. Sum the following to n terms :

(*a*) $1^2+2^2+3^2+\ldots n^2$.

(*b*) $1^3+2^3+3^3+\ldots n^3$.

(*c*) $a+2ax+3ax^2+\ldots nax^{n-1}+(n+1)ax^n$.

4. Prove that $n\{{}^nC_r+{}^{n-1}C_{r-1}\}={}^{n}C_{r}$.

5. If $c_0, c_1, c_2\ldots$be binomial coefficients, prove that $c_0c_2+c_1c_3+\ldots c_{n-2}c_n=(2n)!/(n^2-p^2)!$ where p takes all values from 2 to n.

6. (*a*) Establish the principle of undetermined coefficients.

(*b*) Separate $(8x^2+10x+23)/(x^3+x^2-8x-12)$ into its linear partials.

7. (*a*) If a_n is relatively large P_{n-1}/Q_{n-1} is a close approximation to the value of the fraction.

(*b*) Find a close approximation to 346.62/29.5306.

8. (*a*) Develope a^x in a series according to powers of x.

(*b*) Thence deduce the logarithmic series.

(*c*) Develope $l.(1+x)^{\frac{1+x}{2}}+l(1-x)^{\frac{1-x}{2}}$ in ascending powers of x.

9. (*a*) What is a recurring series, and what is its scale of relation ?

(*b*) The series $1+x+2x^2+2x^3\ldots$is of the 3rd order. Find the nth term, and the sum of n terms.

HONOURS.

Conics I.

1. (*a*) Write down three important equations of the line and explain the parameters in each. (*b*) Show that a linear equation in x and y always represents a straight line.

2. Prove that the internal bisectors of the angles of a triangle are concurrent.

3 (*a*) Find the co-ordinates of the point which is the inverse of $(x'y')$ with respect to $x^2+y^2=r^2$. (*b*) Show that a straight line inverts into a circle through the origin.

4. (*a*) Interpret the meaning of $x'^2+y'^2+2gx'+2fy'+c$ with respect to the general circle. (*b*) A point moves so that the tangents from it to two fixed circles are in a constant ratio; show that the locus of the point is a circle.

5. (*a*) Find the Cartesian equation of the general conic in terms of the eccentricity; and thence write down the equations of the several conic sections. (*b*) Deduce from (*a*) the equation of the asymptotes, and show that the hyperbola is the only conic with real asymptotes

6. Tangents are drawn from any point P to a parabola; prove that the chord of contact and all chords parallel to it are bisected by a line through P parallel to the axis.

7. Find the m-equations of the tangents to the ellipse and hyperbola; and point out any limit to the possible directions of real tangents.

8. (*a*) $y=mx$ and $y=m'x$ are two conjugate diameters of the standard ellipse. Prove $mm'=-b^2/a^2$. (*b*) Chords are drawn from a point on an ellipse to the end points of any diameter; show that the diameters parallel to them are conjugate.

HONOURS.

Synthetic Solid Geometry.

1. A, B, C, D, E, F are any six points in space. Show how to find a point equidistant from A and B, equidistant from C and D, and equidistant from E and F.

2. In any tetrahedron show that $9\,\Sigma m^2 = 4\,\Sigma e^2$, where m denotes a median and e an edge.

3. Prove that the volume of a frustum of a pyramid is $\frac{1}{3}h(B + B' + \sqrt{BB'})$, where B, B' are the areas of the bases, and h is the height.

4. (*a*) If a, b, c are direction edges of a *ppd.* and λ, μ, ν are the face angles, develope an expression for the volume.

(*b*) Hence show how *ppds.* are separable into two classes.

5. Prove by summation of laminae that the volume of a sphere is $\frac{4}{3}\pi r^3$.

6. (*a*) State Pappus's theorems on solids and surfaces.

(*b*) Find the volume and the whole surface of the figure generated when a semicircle revolves about a tangent making angle θ with its limiting diameter.

7. Show how to project a circle so that (*a*) any point within it, and (*b*) any point without it may become the centre of the projection, and give the figure formed in each case.

8. Prove by projection that a parabola bisects the join of the point of intersection of two tangents with the mid-point of their chord of contact.

9. Develope the relation existing between a spheric triangle and its polar, and find the limits for the sum of the angles.

HONOURS.

Mathematics.

Algebra II.

1. Explain to what extent the distributive law applies in multiplying absolutely convergent series, or semi-convergent series.

2. Show that $\Sigma f(n)$ and $\Sigma a^n f(a^n)$ are convergent or divergent together, where a is any integer greater than unity, and $f(n)$ is positive and decreases as n increases. Apply this to examine the convergence of

$$\frac{1}{2(\log 2)^p} + \frac{1}{3(\log 3)^p} + \frac{1}{4(\log 4)^p} + \cdots$$

3. Show that the generating function of $\sum_0^\infty f(n)x^n$ is of the form $(1-x)^r$, where $f(n)$ is a positive integral function of n. Find r, and illustrate by any example.

4. (*a*) Develope a formula for finding the successive penultimate convergents of a recurring continued fraction; and use it to find the first three penultimate convergents of $2+\cfrac{1}{1+}\ \cfrac{1}{1+}\ \cfrac{1}{1+}\ \cfrac{1}{4+}\cdots$

(*b*) Solve $x^2-7y^2=1$ in positive integers.

5. Find a simple test to tell whether the continued fraction $\cfrac{b_1}{a_1+}\ \cfrac{b_2}{a_2+}\ \cfrac{b_3}{a_3+}\cdots$, where all the quantities are positive, oscillates or converges to a definite limit. Apply the test to the fraction $\cfrac{x}{1+}\ \cfrac{1^2x}{2-x+}\ \cfrac{2^2x}{3-2x+}\ \cfrac{3^2x}{4-3x+}\cdots$

6. d_1, d_2, ... are the divisors of N; and there are $\varphi(d_1)$ numbers less than d_1 and prime to it. Show that $\Sigma\varphi(d)=N$.

7. A line segment is divided at random into 3 parts. Find the probability that the parts may form the sides of a possible triangle.

FINAL HONOURS.

Trigonometry II.

1. Explain geometrically the relation $(\cos\theta + i\sin\theta)^n = \cos n\theta + i\sin n\theta$.

2. Develope $\cos n\theta$ and $\sin n\theta$ in terms of the powers of the functions of the angle θ.

3. If $\sin(\alpha+i\beta)=x+iy$ show that $\frac{x^2}{\sin^2\alpha}-\frac{y^2}{\cos^2\alpha}=1$, and $\frac{x^2}{\cosh^2\beta}+\frac{y^2}{\sinh^2\beta}=1$; and give the geometrical significance.

4. Prove that $(i)^i = e^{-\frac{\pi}{2}}$.

5. Put $\frac{1}{x^n-1}$ into its partial fractions.

6. Prove that $S_{2n}/B_n = 2^{n-1}\pi^{2n}/(2n)!$ where $s^r \equiv 1/1^r + 1/2^r + 1/3 \ldots$ and $B_n \equiv$ the nth-Bernoullian number.

7. Given $\tan\varphi = n\tan\alpha$, to express φ according to multiple of α.

8. Expand $-i\sin(\cos\theta)\sin(i\sin\theta)$ in functions of multiples of θ.

9. Prove that $\sin\theta + \frac{1}{3}\sin 3\theta + \frac{1}{5}\sin 5\theta + \ldots = \pi/4$.

10. Find the *G.F.* of the series

$$1 + 2\sin 2\theta - 2\sin 3\theta + 2^2\sin 5\theta - 2^3\sin 5\theta \ldots$$
$$1 + 2\cos 2\theta - 2\cos 3\theta + 2^2\cos 4\theta - 2^3\cos 5\theta \ldots$$

HONOURS.

Calculus I.

1. Find $\frac{du}{dx}$ when u equals (a) $\frac{1}{2}l.\tan\frac{1}{2}\theta - \frac{1}{2}\cos\theta\operatorname{cosec}^2\theta$; (b) $xe^{\tan^{-1}x}$; (c) $\sin\theta\cosh\theta + \cos\theta\sinh\theta$.

2. Find the nth derivative of $x^3\sin x$ by means of Leibnitz's theorem.

3. (a) Develope the form $X\frac{\partial x}{\partial x} + Y\frac{\partial u}{\partial y} + z\frac{\partial u}{\partial z}\partial u = 0$ for a tangent at the point x, y.

(b) The curves $\left(\frac{x}{a}\right)^n + \left(\frac{y}{b}\right)^n = 2$, where n is variable, touch one another at the point a, b.

4. (a) Find an expression for $\tan\varphi$ in polar curves.

(b) Find the equation of the curve which cuts all radii vectors at the same angle; and show that its radius of curvature at any point is proportional to the radius vector at the point.

5. Explain the function of du/dx and d_2u/dx^2 in the theory of maximum and minimum.

(b) The greatest triangle formed by the ordinate, abscissa and radius vector in a central ellipse is $\frac{1}{4}ab$.

6. (a) Develope $\left(\frac{\sin^{-1}x}{x}\right)^2$ in ascending powers of x.

(b) From (a) show that
$\theta^2/\sin^2\theta = 1 + 2^2\sin^2\theta/(3.4) + 2^2.4^2.\sin^4\theta/(3.4.5.6) + \ldots$

7. (*a*) Show that $\int_{-1}^{1} \frac{1+x}{1+x^2}\,dx = 1.5708\ldots$

(*b*) The area of the curve $y = \frac{1}{x\sqrt{2x-1}}$ between limits 1, ∞ is $\frac{1}{2}\pi$.

8. Find (*a*) $\int \tan^5\theta d\theta$; (*b*) $\int \frac{d\theta}{\cos\theta}$; (*c*) $\int_0^1 x\sin^{-1}x.dx$.

FINAL HONOURS.

Analytic Solid Geometry.

1. A line parallel to the plane $x=0$ intersects the line $z=c$, $y=0$, and the curve $x^2+y^2=a^2$, $z=0$. Find the equation of the generated surface.

2. Prove that every tangent plane to a Hyperboloid of one sheet cuts the surface in two straight lines.

3. Show that 3 confocal conicoids may pass through any given point.

4. Show that $ax^2+by^2+cz+2fyz+2gzx+2hxy+d=0$ is reducible to the form $s_1x^2+s_2y^2+s_3z^2+d=o$ where s_1, s_2, s_3 are roots of the discriminating cubic.

5. Derive the three invariants of the ellipsoid, and give their geometrical interpretation.

6. Give a method of studying the character of any plane section of a conicoid.

7. ρ_1, ρ_2 are the principal radii of curvature of a surface. Find the radius of curvature on a plane making an angle θ with that of ρ.

8. Prove that every plane curve of the 3rd degree is the projection of the curve of intersection of two quadric surfaces.

FINAL HONOURS

Differential Calculus.

1. Give a geometrical explanation of $du=\frac{\partial u}{\partial x}dx+\frac{\partial u}{\partial y}dy$.

2. If $u=\varphi(x+\xi t, y+\eta t, z+\zeta t)$ where all the variables are independent, show that symbolically

$$\frac{\partial^r u}{\partial t^r}=\left(\xi\frac{\partial}{\partial x}+\eta\frac{\partial}{\partial y}+\zeta\frac{\partial}{\partial z}\right)^r u.$$

3. Show that for the curve $u_n+u_{n-1}+\ldots u_2+u_1+u_0=0$, the first polar of the origin is $u_{n-1}+2u_{n-2}+\ldots (n-1)u_1+nu_0=0$, where u_r denotes the terms of r dimensions.

4. Derive the polar reciprocal of $ax^n+by^n=1$ with respect to constant k^2; and thence show that the polar reciprocal of a central conic is a central conic.

5. The curve $(4x-3y)^2+3x^2y-6xy^2=0$ has a cusp at the origin. Find its nature.

6. If $x=ft$ and $y=\varphi t$, show that

$$\rho(f't\cdot\varphi''t-f''t\cdot\varphi't)=\{(f't)^2+(\varphi't)^2\}^{\frac{3}{2}}.$$

Thence find the radius of curvature of the cycloid.

7. Given the curve $f(x,y,a,b)=0$ with the relation $F(a,b)=0$, where a and b are variable parameters, show how to find the equation of the envelope.

Apply to the case $\frac{x}{a}+\frac{y}{b}=1$ and $ab=k^2$.

8. If $u=f(x,y)$ show that when u is a maximum we must have $\frac{\partial^2 u}{\partial x^2}\cdot\frac{\partial^2 u}{\partial y^2}>\frac{\partial^2 u}{\partial x\cdot\partial y}$.

9. In the curve $x^3+y^3-3axy=0$ show that both axes are tangents at the origin; and thence draw the graph.

Integral Calculus.

1. Find the following integrals:

(i) $\int \frac{dx}{x\sqrt{1+x+x^2}}$ (ii) $\int \frac{\tan\theta d\theta}{a+b\tan^2\theta}$

(iii) $\int \frac{(x-1)dx}{x^4+2x^3-x^2-4x-2}$ (iv) $\int_0^{\frac{\pi}{4}} \sin^2\theta\cos^{-6}\theta d\theta$

2. Find reduction formulae for

(i) $\int \frac{x^m dx}{(a+cx^2)^2}$ (ii) $\int \sin^m\theta\cos^n\theta d\theta$

3. Integrate (i) $\int_0^\infty \frac{x^m dx}{1+x^n}$ where m and n are positive integers, and $n>m$.

(ii) $\int_0^\infty e^{-x}x^{n-1}dx$

4. Deduce the form $\int_{x_1}^{x_2}\int_{y_1}^{y_2}\int_{z_1}^{z_2} dzdydx$ for the volume of a solid, and apply it to the equation $x^2+y^2+z^2=a^2$.

5. Defining $\sinh y=\frac{1}{2}(e^y-e^{-y})=x$, prove that $\sinh^{-1}\frac{x}{a}=l.\ \frac{x+\sqrt{x^2+a^2}}{a}$ and $\cosh^{-1}\frac{x}{a}=l.\ \frac{x+\sqrt{x^2-a^2}}{a}$

HONOURS.

Finite Differences.

1. Find the relations connecting the symbols Δ, E, and D; and show that $E^n \Delta^n u_x = \Delta^n E^n u_x$.

2. Expand $\varphi(x)$ in factorials; and deduce Maclaurin's differential series.

3. Prove the symbolic relation $\varphi(t) = \varphi(D) e^{ot}$, and verify it where $\varphi(t) = (t-1)^3$.

4. Use a method of approximation to find x, correct to 4 places of decimals, such that $u_x = 46000$; given $u_0 = 45399$, $u_1 = 46947$, $u_2 = 48481$.

5. Find $\Sigma a^x \varphi(x)$ as a series in ascending differences of $\varphi(x)$. Employ the result to sum the series whose nth term is $2^n n^3$.

6. Sum the series $\sin b + \sin(a+b) + \ldots\ldots + \sin(x-1a+b)$ by difference methods.

7. Employ the Euler-Maclaurin sum series (a) to find Bernoulli's numbers successively, (b) to sum $\sum_1^{100} 1/x^2$, correct to 4 places of decimals.

HONOURS.

Differential Equations.

1. Eliminate a and b from $(x-a)^2+(y-b)^2=r^2$, and interpret the geometrical meaning of the resulting differential equation.

2. Explain how to separate the variables in $Mdx+Ndy=0$, when M and N are homogeneous functions of x and y of degree n.

Solve $x^4dx+y^2\sqrt{x^2-y^2}(xdy-ydx)=0$.

3. Find the necessary and sufficient condition that $Mdx+Ndy=0$ may be an exact differential equation; and solve the equation when it is exact.

Solve $(x^3y^4-5y)dx+3(x^4y^3-x)dy=0$.

4. Reduce $(x^2-a^2)p^2-2xyp-x^2=0$ to Clairaut's form. Explain the geometrical meaning of its primitive, and of the loci found from its two discriminants.

5. Find the equation of the curve in which the sum of the subtangent and subnormal is constant and equal to $2a$. If a is a parameter, find the orthogonal trajectories of the system.

6. Prove the relation $f(D)e^{ax}X=e^{ax}f(D+a)X$; and use it to solve the general linear equation $f(D)y=X$.

Solve $(D^3-4D^2+5D-2)y=x$.

7. Find the general solution of the homogeneous equation $(A_0x^nD^n+A_1x^{n-1}D^{n-1}+\ldots\ldots+A_n)y=X$, (a) when $X=0$, and (b) when X is a function of x.

Solve $(x^3D^3-2x^2D^2+4xD-4)y=12x^4$.

HONOURS.

Spherical Trigonometry and Astronomy.

1. Prove the cosine formula in Sph. Trigonometry and make it logarithmic (*a*) by a transformation, (*b*) by an auxiliary angle.

2. The three direction edges and the included angles of a parallelopiped being given, show that its volume is $xyzn$ and find the form of n.

3. Given two angles of a triangle and the included side, work out the value of another part by means of Napier's rule of circular parts.

4. Find the change in longitude in following the rhumb line from lat. φ_0 to lat. φ at angle θ with the meridian.

5. Explain how the spheroidal form of the earth affects latitude, and find a formula for calculating the "correction for the latitude."

6. Indicate, without complete work, how we may find the part of the equation of time due to (*a*) the obliquity of the ecliptic, and (*b*) the eccentricity of the orbit.

7. Describe the precession of the equinoxes and explain the principal astronomical effects due to it.

8. Given the constant of aberration and the velocity of light, show how to calculate the sun's distance.

HONOURS.

Determinants and Theory of Equations.

1. Solve the set $a_{11}x_1+a_{12}x_2+\ldots+a_{1n}x_n=b_1$.
$\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$
$a_{n1}x_1+a_{n2}x_2+\ldots+a_{nn}x_n=b_n$.

If $\begin{vmatrix} a_{11}a_{12}\ldots a_{1n}b_1 \\ \ldots\ldots\ldots\ldots \\ a_{n1}a_{n2}\ldots a_{nn}b_n \end{vmatrix}=0$, and $\begin{vmatrix} a_{11}a_{22}\ldots a_{n-1\,n-1} \end{vmatrix}$ is not zero, show that the last equation is a consequence of the others.

2. Find an expression for a minor of order k of the reciprocal of any determinant in terms of the original determinant and its elements. Thence show that when $\triangle=0$, the elements of any two rows of the reciprocal are proportional.

3. Express the nth convergent to the general continued fraction in determinant form; and point out how any series may be expressed as a descending continued fraction.

4. (*a*) Find s_r in matrix form, where it is the sum of the nth powers of the roots of $x^n+p_1x^{n-1}+\ldots+p_n=0$.

(*b*) Show that $\Sigma\alpha^a\beta^q\gamma^r=s_ps_qs_r-s_{p+q}s_r-s_{q+r}s_p-s_{r+p}s_q+2s_{p+q+r}$; and indicate a proof that every rational symmetric function of the roots is rationally expressible in terms of the coefficients.

5. Prove Descartes' rule for signs; and show how far it determines the number of positive, negative, or imaginary roots. Apply it to find the nature of the roots

of the cubic, when the discriminant is zero, positive, or negative.

6. Find the reducing cubic of the general biquadratic. Use it to solve $x^4+8x^3-66x^2-8x+65=0$.

7. Prove Sturm's theorem for finding the number and situation of the single and multiple roots of an equation. Illustrate with $x^4-x^3-x+1=0$.

HONOURS.

Conics II.

1. Transform $8x^2+3y^2+12xy=100$ to the axes.

2. Obtain the invariants $(ab-h^2)/\sin^2\omega$ and $(a+b-2h\cos\omega)/\sin^2\omega$, and interpret them geometrically.

3. Prove that the radius of curvature of a conic is $N\left(\frac{b'}{b}\right)^2$, where b' is the diameter conjugate to the point of contact.

4. (*a*) Interpret the equation $l/\alpha+m/\beta+n/\gamma=0$.

(*b*) Find the equation of the tangent to (*a*) at the point $\alpha'\ \beta'\ \gamma'$, and thence find the tangential equation.

5. Develope the two equations which give the foci of a conic.

6. Find the equation of the nine points circle.

7. Develope the equation of the four common tangents to two circles.

8. The conic $S+LM+MN+NL=0$ can be written $S-L^2+(L+M)(L+N)=0$, also $S-M^2+(M+N)(M+L=0$, also $S-N^2+(N+L)(N+M)=0$. Interpret these relations.

9. Find the equation of the curve enveloped by the line $x\sec\theta-y+a\tan\theta=0$, where θ is indeterminate.

HONOURS.

Quaternions.

1. State and prove the condition that—

(*a*) Any three coinitial vectors terminate in line.

(*b*) Any two vectors are perpendicular to one another.

(*c*) Three vectors are complanar.

(*d*) Any number of vectors may form a closed figure.

2. Examine if the diagonals of a parallelopiped, as vectors, taken in either direction can form a closed figure.

3. (*a*) If $\varepsilon^{\frac{2\theta}{\pi}\cdot}$ be a rotor through the angle θ, show that $\varepsilon^{\frac{2}{3}}-1=\varepsilon^{\frac{4}{3}}$, and (*b*) if $\varepsilon^{\frac{2}{3}}+\varepsilon^{\frac{1}{3}}=m(\varepsilon+1)$ find the numerical value of m.

4. ABC is a $\triangle$ with centroid O, and P is the centroid of the equalateral $\triangle$ BCA′, Q of CAB′ etc. Prove that OP, OQ, OR as vectors are sides of an equilateral $\triangle$.

5. (*a*) Establish the relation $\mathrm{V}.\mathrm{V}\alpha\beta.\mathrm{V}\beta\gamma=-\beta\,\mathrm{S}\alpha\beta\gamma$.

(*b*) Find the condition that the altitudes of a tetrahedron may be concurrent.

6. Interpret the equations (*a*) $\rho=a+x\gamma$,
(*b*) $\mathrm{S}\delta\rho=-p^2$, (c) $\rho=\gamma+x\mathrm{V}\alpha\beta$.

7. Explain the fundamental geometrical idea involved in the general vector equation of a circle.

8. Discuss the relations of ρ, $\varphi\rho$, and $\psi\rho$ in the central equation of the ellipse.

9. Write the equation of the normal at point ρ in an ellipse, and point out how from this you can obtain the equation of the evolute.

PRELIMINARY HONOURS.

Physics.

Hydrodynamics and Thermodynamics.

1. Find the centre of pressure on a rectangular surface immersed in a liquid, having given the depths of two horizontal sides.

2. Prove that in an atmosphere of uniform temperature at rest, the pressure decreases in G.P. as the altitude increases in A.P. Hence shew how to calculate approximately the vertical distance between two places at which the reduced readings of the barometer are given.

3. A vessel in the form of a circular cylinder contains fluid; find the relation between the pressure and tension. Hence find the greatest fluid pressure which a cylindrical cast-iron pipe can sustain, the diameter being 10 inches and the thickness $\frac{5}{24}$ inch; the tensile strength of cast-iron being 8 tons-wt. per sq. inch.

4. When do bodies floating in a liquid repel one another? Explain the phenomenon.

5. A cylindrical vessel is filled with liquid, and the vessel and liquid are made to rotate uniformly about the axis of figure; find how much liquid will run over.

6. Prove that when a liquid film is distended, the superficial energy per unit of area is numerically equal to the tension per unit of length.

7. Describe an indicator-diagram and explain how work done by expansion is measured thereby.

8. Define the voluminal elasticity of a substance.

Shew how it is found on an indicator-diagram, and apply this method to prove that the elasticity and pressure of a gas are numerically equal.

9. Draw the isothermal for a gram of aqueous fluid at 100° C. from a pressure of 60 cm. of mercury to a pressure of 90 cm., stating the characteristics of each part thereof.

10. Define the absolute zero of temperature. Explain how it is theoretically found by Carnot's heat engine.

11. Define the two principal specific heats and the two principal elasticities of a substance, and prove the relation between these four quantities.

12. Explain how to measure theoretically the lowering of the freezing-point of water by pressure. *Or*, prove after Rankine that the square of the speed of a sound-wave is equal to the product of the elasticity and specific volume of the medium through which the wave is passing.

Preliminary Honour Physics.

[N.B.—Only 12 questions to be answered.]

Stereodynamics.

1. Find the centre of mass of a uniform wire in the form of a circular arc, and then write down the position of the c. of m. of a uniform wire in the form of a semicircle.

2. A particle describes an ellipse under force towards a focus. If the velocity be resolved into components normal to the major axis and the radius vector, prove that the components are constant in magnitude.

3. In the system of pulleys in which the same string goes round all the pulleys, the lower block has 10 pulleys and carries 2000 pounds. If 120 pounds be suspended from the free end of the rope, find the tension of the rope and the acceleration of the 2000 pounds.

4. A particle moves under the action of a central gravitation force; find the hodograph of its motion. Hence find the apparent motions of the fixed stars due to the Earth's revolution around the sun.

5. A particle slips from the top of a smooth sphere; find how far it falls before leaving the sphere.

6. Define simple harmonic motion and find its period in terms of the strength of the centre of force.

7. Define principal axes of inertia, and prove that through every point in the plane of a plane body there is at least one pair of principal axes.

8. If pieces of mud are thrown from the top of the wheels of a wagon (diameter d feet) moving with a speed

of v vels, prove that v must be greater than 4_1 d vels for the mud to clear the wheels.

9, 10, 11, 12. Any four of the following questions:

1. Prove that the acceleration of angular momentum of any body about an axis through the centre of mass, under the action of any forces, is the same as if that axis were fixed.

2. Prove from kinematics that the length of the arc of a cycloid measured from the vertex to any point is twice the length of the chord drawn from the vertex to the corresponding point in the auxiliary circle. Hence deduce the length of the complete cycloid.

3. A body rests on a rough horizontal board and is joined by a string to another body hanging vertically, and the bodies are just on the point of moving. Will the bodies remain at rest if the system be raised vertically, (1) with uniform velocity, (2) with variable velocity? Prove your answers.

4. Prove that in planetary motion $v^2 = k(2a - r) \div a\ r$. What is k?

5. Find the moment of inertia of a uniform right circular cylinder about a diameter of the base.

6. A uniform right circular cylinder has a string wound round its middle normal to the axis; the string is suddenly jerked; compare the subsequent energies of translation and rotation.

7. A uniform chain is hanging vertical, and its lower end just touches the floor. If it be let fall, prove that the pressure on the floor at any time during the fall is 3 times the weight of the chain on the floor.

FACULTY OF ARTS: PRELIMINARY HONOUR PHYSICS.
AND
FACULTY OF PRACTICAL SCIENCE: PHYSICS IV.

Mathematical Theory of Electricity.

1. Prove that a closed conducting surface divides space into two parts electrostatically independent of each other.

What use is made of this fact in the construction of electrostatic instruments?

2. Describe with diagrams the "Attracted Disc Electrometer," explaining the principles and use of the "Replenisher" and the "Guage."

Derive the formula for the use of the instrument and show how it is applied.

3. Two metal plates are parallel to each other and are separated by a distance small in comparison with their diameters. The intervening space is uniformly ionized and it is found that a potential difference of E volts produces a saturation current, across the gas, of I units. If now the plates be pushed towards each other so that they are only half as far apart as formerly, it will be found that E volts will produce a saturation current of only $\frac{1}{2} I$ units. Explain this as fully as you can.

4. (*a*) Describe a method by which the velocity of the ions in an electrostatic field has been measured.

(*b*) How does the velocity of the positive ion differ from that of the negative ion in the same field?

5. What are the two systems of absolute units used in electrical measurement? Discuss the relation between them.

6. (*For Science candidates only.*) A circular coil of 500 turns (mean radius 20 cm.) lies flat on a table. Its terminals are connected to a circuit including a ballistic galvanometer. If the total resistance of the circuit be 100 Ω, find, *in coulombs*, the quantity of electricity that passes around it when the coil is turned over and replaced on the table. Given $H=0{\cdot}19$, Dip$=72°$.

7. (*For Arts candidates only.*) Derive the expression for the energy per cubic centimetre in a field of force where the specific inductive capacity is K.

8. A ring of cast-iron of rectangular section is 6 cm. thick; internal radius, 4 cm.; external radius, 10 cm. It is wound with 300 turns of wire. Resistance 0·5 Ω. Calculate: (*a*) its *self-induction*, and (*b*) its *time-constant* for currents of 0·8 amperes and 2 amperes.

Grey Cast-Iron.

H	μ
5	800
10	500
21.5	279
42	133
80	100
127	71

1 $\Omega=10^9$ C.G.S. units of resistance (E.M.U.)
1 Amp.$=\frac{1}{10}$ C.G.S. units of current (E.M.U.)
1 volt$=10^8$ C.G.S. units of P.D. (E.M.U.)

PRELIMINARY HONOURS.

Botany.

FIRST PAPER.

1. Make a list, in the following tabulated form, of the plants contained in the bundle submitted:

No.	Order.	Genus.	Species.

2. Select from the bundle one specimen belonging to each of the following orders, and describe it as accurately as you can under the following heads: (1) Root, (2) Stem, (3) Leaves, (4) Flowers, (5) Fruit.

1. Labiatae.
2. Polygonaceae.
3. Juncaceae.

2. Make a list of the plants in the bundle producing the following fruits:

1. Capsule.
2. Achene.
3. Nut.

PRELIMINARY HONOURS.

Botany.

SECOND PAPER.

Morphology.

1. "Demarcation of the annual layers of wood in the trunks of trees results from two or more causes, separate or combined." Explain this statement.

2. Describe the mode in which stomata are produced, and explain their use.

3. Explain any three ways in which leaves are disposed in the bud.

4. What are the uses of (1) Root, (2) Stem, (3) Leaves, (4) Stamens?

5. Mention and explain the terms applied to the various modes of insertion of stamens.

6. How would you distinguish between a root and a subterranean stem?

7. Describe the leaves of any two Canadian plants which are specialized for the capture of insects and the utilization of animal matter.

8. Explain how any Papilionaceous flower is adapted for Cross-pollination. Give name of plant described.

9. Describe or give a drawing of the following forms of corolla: (1) Cruciferous, (2) Rosaceous, (3) Liliaceous, (4) Caryophyllaceous.

10. Define the following kinds of fruit: (1) Pome, (2) Berry, (3) Drupe, (4) Achene, (5) Samara.

PRELIMINARY HONOURS.

Botany.

THIRD PAPER.

Histology, Physiology, Ecology.

1. What is Protoplasm? Describe its movements.

2. Describe any three ways in which Cell-formation takes place.

3. Describe any four of the principal Tissues.

4. Mention the three Tissue Systems and describe any one of them.

5. How do plants (1) obtain their food, (2) and how is it transported in the plant?

6. What are the four principal factors by which Mesophytes are affected? Explain the effects of any two of them.

7. Mention the different Classes of Hydrophytes and explain how they are adapted to their environment.

8. The subject of Symbiosis may be divided into three parts. Mention these parts and write notes on any one of them.

9. Under the Class of Reproductive adaptations are those for the distribution of seeds. Mention four of these adaptations and explain fully any one of them.

10. Explain any three adaptations for securing Cross-pollination.

PRELIMINARY HONOURS.

Physiology.

1. Name the muscles of mastication and explain how they perform their work.

2. Name the muscles of respiration and explain how they perform their work.

3. Explain how fibrinogen is formed. Distinguish the composition of blood plasma, blood-serum and lymph from each other, and explain how you would obtain some of each.

4. Discuss the functions of the liver.

5. Name the crainial nerves which are (*a*) purely afferent, (*b*) purely efferent, and (*c*) those which are both. Where are the afferent and efferent fibres separated in the cord? How do we know?

6. Describe the papellæ of the tongue. Explain how the different nerve impulses which originate in it are carried to the sensorium.

PRELIMINARY HONOURS.

Histology.

1. Name the various kinds of epithelial tissues. Give the distinguishing characteristics and distribution of any one kind.

2. Give the histological structure of large intestine. Distinguish from small intestine.

3. Classify muscle tissues and distinguish each class with the high power of the microscope.

4. Write explanatory notes on *tissue, epinuerium, villus, glomerulus, demilunecell.*

HONOURS.

Animal Morphology.

1. (*a*) Describe the reproductive organs of the earth-worm. (*b*) Contrast the two prominent divisions of the chaetopoda.

2. (*a*) What are the main general characters of the arthropoda? (*b*) Name the classes of this phylum, with an example of at least one species of each class.

3. Describe the mouth parts of the grasshopper.

4. Give a brief description of the means by which locomotion is carried out in the following animals: (*a*) Star-fish, (*b*) squid, (*c*) Amœba, (*d*) Paramæcium.

5. Describe the cloacal and infra-branchial chamber of fresh-water mussel.

HONOURS.

Histology.

1. Name the various kinds of connection tissues. Give the distinguishing characteristics and distribution of hyaline cartilage.

2. Describe (*a*) a cross section of a nerve tree (trunk). (*b*) Longitudinal section of a nerve fibre.

3. Compare a section of lymphatic gland with one of spleen.

4. Give the histological structure of small intestine.

5. Draw, describe and identify specimens submitted.

FINAL HONOURS.

Biology.

Physiology.

1. How can myosin be prepared? Muscle plasma? What fats and carbohydrates are present in muscle? Name the extractives obtained from muscle.

2. Discuss and illustrate the resemblances between the action of the organized ferments and that of the digestive enzymes. Specify the conditions which vary the rate of enzyme action.

3. What changes take place in the carbohydrates and proteids during absorption? How have these changes been demonstrated?

4. Discuss the relation of the nervous system to the quantity of urine secreted.

5. Explain the function of the nervous system in the production and regulation of heat.

6. Describe some of the somatic and some of the visceral reflexes of the spinal cord.

7. Explain the terms: *Deficiency phenomena, aphasia, aphemia, amnesia, sensory-motor areas, visual word area, binocular vision, auditory phantoms, neuro-epithelium.*

FINAL HONOURS.

General Biology.

1. Describe the early development of the body, and especially the nervous system of the vertebrate embryo.

2. What are the main sources of evidence in favour of organic evolution? Illustrate. Distinguish clearly Darwin's contribution to the subject as contrasted with Lamarck's.

3. State the laws of variation and indicate the evidence in support of them.

4. Explain and illustrate the principles that have been operative in the migration and distribution of animals.

PRELIMINARY HONOURS.

Organic Chemistry.

1. Discuss the compounds of the formula $C_6H_{12}O_6$.

2. (*a*) Give the equations for the steps in the manufacture of methyl-orange. (*b*) Write its graphic formula. (*c*) Discuss the manufacture and character of the dyes of which methyl-orange is the type.

3. Compare and contrast the preparation and properties of urea and of thiourea.

4. Discuss the relations to each other of urea, uric acid, alloxantin and caffeine.

5. Write the equations for the preparation of methylamine hydrochloride.

6. Write equations for reactions which ethyl bromide and ethyl iodide undergo with various reagents.

FACULTY OF ARTS (HONOURS)

AND FACULTY OF PRACTICAL SCIENCE (COURSES B AND D).

Industrial Chemistry.

[*Eight* questions *well* answered forms a full paper.]

1. Taking the sp. gr. of fulminate of mercury as 4.4 calculate the pressure produced by its explosion, the temperature being assumed to be 1500° C.

2. Describe the different classes of complex (or siliceous) cements, especially the material and manner of burning.

3. Discuss distillation, describing as minutely as you can the important features of the process, *or* of the different parts of the apparatus.

4. Discuss the manufacture and uses of phosphorus, *or* iodine, *or* carbon bisulphide, *or* peroxides, *or* cyanides, *or* aluminium sulphate.

5. In what ways does the presence of iron *or* of sulphides in water affect it disadvantageously for industrial purposes?

6. Describe the Hargreaves-Bird process for making soda electrolytically, *or* describe the manufacture of nitric acid.

7. What are the relative advantages and disadvantages of the Le Blanc and the ammonia soda processes?

8. Describe with as much detail as you have time for, the process and products of the destructive distillation of coal.

9. Describe the various methods for the manufacture of soap, *or* discuss the general principles of saponification.

10. Describe any of the processes by which sugar is extracted from beet-sugar molasses.

11. Describe any process for making chemical wood pulp.

PRELIMINARY HONOURS.

Physiological Chemistry.

1. Discuss *albumins* under the following heads: (*a*) Elementary composition, (*b*) crystallization, (*c*) solubility, (*d*) changes caused by neutral salts and alcohol, (*e*) coagulation, (*f*) optical activity, (*g*) decomposition, (*h*) molecular weight and constitution.

2. Discuss the constitution of the *monosaccharides* and indicate their chemical transformations in the animal economy.

3. Describe shortly the *nucleinic bases.*

4. Discuss the constitution and relations of *uric acid.*

5. Indicate the relationships of *indol, skatol, indican,* and *indigo blue.*

6. Describe the principal acids of the aromatic series found in the animal body.

FACULTIES OF ARTS (HONOURS) AND PRACTICAL SCIENCE.

Physical Chemistry I.

[N.B.—Not more than EIGHT questions to be attempted.]

1. Give arguments for 12 and not some multiple or submultiple of that number being the atomic weight of carbon.

2. How has Mendeléef fitted the argon group of elements into the periodic law? Give a short account of his speculations regarding the ether.

3. How much heat measured in calories would be produced by allowing 20 grammes of carbon dioxide to flow into an empty flask of 22·4 litres capacity? Show whether or not the volume of the flask makes any difference to the result.

4. Show in what ways the melting point of a solid may be affected by mixing with it another solid.

5. Show that Boyle's law would follow from the kinetic theory of gases.

6. Draw a figure representing the relation of pressure and temperature for the different phases of copper sulphate and water, *or* apply the phase rule to the systems formed by two liquids such as ether and water.

7. Discuss the variation of physical properties in homologons series.

8. Describe fully any method of determining the molecular weight of a substance that cannot be volatilised.

9. Show clearly that the molecular conductivity of an

electrolyte is not of itself a measure of the degree of dissociation of the dissolved substance.

10. Starting from the fundamental ideas of mass action, prove that when two substances that act on each other are brought together in equivalent proportions the state of equilibrium is expressed by an equation of the form $$\frac{(a-\xi)^2}{\xi^2} = \frac{k'}{k}$$

11. Why does an excess of the reagent aid in making a sparingly soluble precipitate still less soluble?

FINAL HONOURS.

History of Chemistry.

Discuss any *five* of the following subjects:

1. The Phlogiston Theory of Combustion, its value to science, and its overthrow.
2. Lavoisier and the Law of Conservation of Mass.
3. Dalton and the Law of Multiple Ratios.
4. Atomic Weights, Combining Weights, Equivalent Weights.
5. Avogadro and the Molecular Hypothesis.
6. Influence of Organic Chemistry on the selection of atomic weights.
7. The Law of Atomic Heat.
8. The Theory of Types.
9. Kekulé and valency.
10. Contribution of Wislicenus to stereochemistry.

FACULTY OF ARTS AND PRACTICAL SCIENCE.

Economic Geology II.

1. State the chief coal-bearing horizons and write notes on the origin and preservation of coals.

2. Give the approximate compositions of the different varieties of coal from peat to graphite and cite a locality in which each is found, using, where practicable, Canadian occurrences.

3. Describe the occurrence of asbestus and mention its composition, uses, and methods of mining.

4. Give the classification which has recently been proposed for the pre-Cambrian rocks of the Lake Superior region. Name ores which have been mined in these rocks, describing the modes of occurrence of each.

5. Write notes on chrome iron ore, wolframite, bauxite, magnesite, talc and monzonite under the following headings: character, origin, uses, and productive countries or districts.

6. Name substances which are produced as by-products in the mineral industry of Canada.

7. What formations in Ontario afford limestones of economic value? Classify these formations on the basis of their magnesia contents.

8. Write notes on Portland cement, natural rock cement, slag cement, hydrated lime, and lime in the wood-pulp industry.

9. Discuss the possibilities of finding gem-stones in Canada.

10. Describe the occurrence of natural gas in Canada, and point out likely fields for future prospecting.

PRACTICAL SCIENCE.

For Papers in
Junior English,
Junior and Senior Chemistry,
Botany,
Animal Biology,

See Arts Pass Papers.

For Papers in
Physics, Electricity,
Chemistry,
" Industrial,
" Physical,

See Arts Honour Papers.

FACULTY OF PRACTICAL SCIENCE.

Mathematics I.

Algebra.

1. Put $x^4-4x^3-x^2+16x-12$ into four linear linear factors.

2. Explain what meanings you can give to the fractions o/o, a/o, o/a; and find the value of $\{(x+h)^3-x^3\}/h$ as h becomes zero.

3. Draw the graph of $y=\frac{3}{4}\sqrt{16-x^2}$.

4. (*a*) Obtain from the graph a rule for finding the maximum or minimum value of a quadratic function of x, and apply it to $4-3x-x^2$.

(*b*) OX and OY are lines at right angles to each other; A moves along OX and B moves along OY so that AB is of constant length 10. Find the maximum area of the triangle AOB.

5. (*a*) Prove ${}^nP_r=n!/(n-r)!$, and deduce the value of ${}^nC_r$.

(*b*) Deduce the binomial theorem from the product of the n factors $(x+a)(x+b)(x+c)\ldots\ldots$

6. Expand $(1-x)^{\frac{3}{2}}$ to five terms (*a*) by the binomial theorem, (*b*) by the principle of undetermined coefficients, simplifying the results.

7. Separate $\dfrac{x^2-2x-1}{x^3-6x^2+11x-6}$ into its partial fractions.

8. (*a*) Find the modulus of the common system of logarithms, to 5 places of decimals.

(*b*) Given $\theta=l.x$, where θ is in radians and l denotes Napierian logarithms, transform the equation so as to have angular measurement in degrees, and common logarithms.

9. Find as simple a fraction as you can whose value will differ from $\frac{3}{7}\frac{2}{9}\frac{9}{3}\frac{5}{2}$ by less than 1/10000.

FACULTY OF PRACTICAL SCIENCE.

Mathematics I.

Geometry.

1. (*a*) Give a statement as to what an angle is, how it is generated, and how measured.

(*b*) The angles of a triangle are 42°, 63° and 75°. Find the angle at which the internal bisector of 42° meets the external bisector of 75°.

2. Prove (*a*) that the angle in a semicircle is a right angle.

(*b*) That the angle between a tangent and a chord to the point of contact is equal to that in the opposite segment of the circle.

3. (*a*) Develope the relation $a^2 = b^2 + c^2 - 2bc_1$, where a, b, c are sides of a triangle, and c_1 is the projection of c on b.

(*b*) Two poles 20 and 30 feet long are fastened together at the top and raised to an upright position with their feet 15 feet apart. Where will a plumb line suspended from the top meet the ground?

4. (*a*) The rectangle on two sides of a triangle is equal to that on the perpendicular to the third side and the circumdiameter of the triangle.

(*b*) Find the area of the circle circumscribed to the triangle whose sides are 13, 14, 15.

5. Show (*a*) how to divide a given line segment similarly to a given divided segment.

(*b*) How to construct a scale to represent 7 in. to the foot.

6. Describe the regular octohedron, giving (*a*) its faces, edges and corners; (*b*) its reciprocal; (*c*) its dihedral angle; and (*d*) its volume for edge 5.

7. (*a*) Find by any method the expression for the volume of a frustum of a pyramid.

(*b*) A pyramidal tower 20 feet square at the base and 50 feet high has 15 feet in depth blown from the top. Find the volume of the remaining part.

8. Explain any way of finding the volume of a sphere.

FACULTY OF PRACTICAL SCIENCE.

Mathematics I.

Trigonometry.

[Results must be completely worked out.]

1. (*a*) Show how the relation $s=r\theta$ is obtained, and explain what the letters stand for.

(*b*) Find the distance at which a Canadian cent, which is 1 in. diameter, must be placed to appear as large as the earth does as seen from the sun, *i.e.*, $17''{\cdot}6$ diameter.

2. ABC is a triangle right-angled at B. AB$=a$ and the angle at A$=\theta$. BD is perpendicular to AC, DE is perpendicular to BC and EF is parallel to AC.

(*a*) Find the length of AC in terms of a and θ.

(*b*) Find the ratio of the area of the $\triangle$ DBC to the $\triangle$ ABC.

3. (*a*) Obtain the cosine formula.

(*b*) Establish the relation $\triangle = \sqrt{\{s(s-a)(s-b)(s-c)\}}$.

(*c*) Find the area of the $\triangle$ whose sides are 39, 42, 45.

4. Starting from A, I have to run a line to C, 20 miles direct N. At B, 5 miles from A, I come to a large swamp. I turn 54° 12′ E of N and go 4 miles. What is the direction of C then, and how far distant is it?

5. A strut 20 feet long is inclined 60° to the horizon, and is held by a stay rope at the top and whose foot is 15 feet from that of the strut. A weight of 1000 lbs. is suspended from the top of the strut. Find the tension of the stay rope, and the end-thrust on the strut.

6. (*a*) Prove cos(A+B)=..... and write the three remaining expressions.

(*b*) Put sinA+sinB, and cosA−cosB into factors.

7. If $\theta=30°$ find surd expressions for sine, cosine and tangent of $\frac{1}{2}\theta$.

FACULTY OF PRACTICAL SCIENCE.

Astronomy I.

1. Explain the method by which we find the size of the earth.

2. (*a*) Explain what is meant by the moon's (i) horizontal parallax, (ii) diurnal parallax.

(*b*) If the moon's horizontal parallax is 57′ find how many radii of the earth expresses the moon's distance.

3. Name the planets of the solar system in order, giving any peculiarities which each possesses, and the number of moons belonging to each.

4. (*a*) Describe any experiment for finding the velocity of light.

(*b*) Show how we can find the distance of the sun when we know the velocity of light.

5. (*a*) Explain the seeming paradox that the sun is slow when ahead of his mean place.

(*b*) Draw and explain the two graphs which represent the parts of the equation of time, and thence show how to get the graph representing the equation itself.

6. (*a*) Explain, and illustrate, if you can, the occurrence of the seasons.

(*b*) Give the arrangements made in the calender for keeping the seasons to the same time of the year and explain why such arrangements are necessary.

7. (*a*) What is the epact?

(*b*) If we have a full moon on Jan. 5th, on what date will the next January full moon fall?

Queen's University Examinations: April, 1905.

FACULTY OF PRACTICAL SCIENCE.

Mathematics II.

FIRST PAPER.

1. (*a*) Find the equation of the straight line through (a, b) and (c, d).

(*b*) Apply (*a*) to the points $(3,-2)$ and $(-1,3)$; and find (i) the slope of the line, (ii) its distance from the origin, and (iii) the intercepts on the axes.

2. Explain how to find the coordinates of the points common to two graphs. Illustrate with the loci $x^2+y^2=25$, and $x+y=7$, drawing the graphs.

3. Given $f(x)$, a function of x, deduce geometrical meaning of $f'(x)$.

4. What is the strongest beam that can be cut from a log of 24 in. diameter, if the strength varies as the width and as the square of the depth?

5. Differentiate (*a*) $\sqrt{1-x+x^2}$, (*b*) $1/\tan a\theta$, (*c*) $xe^{\tan^{-1}x}$, (*d*) $\log_{10}(1-x^2)$.

6. Show that the equation of the cycloid is $x=a(\theta-\sin\theta)$, $y=a(1-\cos\theta)$; and find the area of one loop of it.

7. (*a*) Explain the meaning of $\frac{ds}{dt}$, $\frac{dx}{dt}$, and $\frac{dy}{dt}$, in the theory of motion, and show that $\left(\frac{ds}{dt}\right)^2=\left(\frac{dx}{dt}\right)^2+\left(\frac{dy}{dt}\right)^2$.

(*b*) A particle moves along the circumference of a circle

with a uniform velocity v. What is its velocity in the direction of the x-axis?

8. A variable square moves with its plane perpendicular to the x-axis, its centre on the x-axis, and the mid point of a side guided by a circle which has a diameter along the x-axis. Find the volume of the figure generated.

FACULTY OF PRACTICAL SCIENCE.

Mathematics II.

SECOND PAPER.

[All numerical results must be worked out to completion.]

1. Deduce the tangent equation $Y-y=(X-x)\frac{dy}{dx}$, and find the equation of the tangents to the ellipse $9x^2+16y^2=144$ where $x=3$.

2. Find the radius of curvature of the parabola $y^2=4x$ at its vertex.

3. (*a*) Show that $\tan\varphi=r\frac{d\theta}{dr}$, where φ is the angle between the radius vector and the tangent to a curve.

(*b*) Find the polar equation of the graph which cuts all the radii vectores at the angle $\frac{\pi}{4}$. Show that the length of the arc between the points r_1 and r_2 is $\sqrt{2}\,(r_1-r_2)$.

4. Integrate (*a*) $\int \frac{d\theta}{\sin}$, (*b*) $\int_1^2 \frac{dx}{x^2+x+1}$,

(*c*) $\int_{-a}^{+a} x^2\sqrt{a^2-x^2}\,dx$, (*d*) $\int_0^3 \frac{dx}{16-x^2}$.

5. (*a*) Find the centre of gravity of a thin uniform plate enclosed by the parabola $y^2=8x$, the x-axis, and the ordinate at $x=5$.

(*b*) Find the volume of the figure of revolution formed when the arc of the parabola in (*a*) revolves about the x-axis (i) by Pappus' theorem, (ii) by integration.

6. (*a*) Find expressions for the moment of inertia and radius of gyration of a plane area about an axis perpendicular to its plane.

(*b*) What are the values of I and k in the case of (i) a circle about a perpendicular axis through its centre, and (ii) a sphere about a diameter.

7. Write out Taylor's expansion, and deduce that of Maclaurin. Use them to expand $(x+a)^n$ and a^x.

FACULTY OF PRACTICAL SCIENCE.

Spherical Trigonometry and Astronomy.

1. Show clearly the relation of a spherical triangle to a 3-faced corner; and give any three properties of the triangle derived from corresponding properties of the corner.

2. (*a*) Prove the theorem known as the cosine formula; and thence deduce an expression for $\cos \frac{1}{2} A$ in terms of the sides.

(*b*) We start from *A*, Lat. 20° N. Long. 45° W., and go 100 knots north to *B*. We then change our course 30° eastward and go 120 knots to C. Find

(1) The direct distance from *A* to *C* in miles.

(2) The latitude of *C*.

(3) The longitude of *C*.

3. (*a*) Deduce any one of Delambre's formulas, and write down the others. (*b*) Thence obtain Napier's analogies.

4. Assuming the relation

$$\text{Sin}A \sin b \sin c = 2\sqrt{\{\sin s \sin(s-a)\sin(s-b)\sin(s-c)\}}$$

find its polar.

5. Prove that the distance along the loxodrome from lat. φ_0 to lat. φ at angle θ with the meridian is $(\varphi_0 - \varphi) \sec \theta$.

6. On Oct. 1 st. at lat. 44° 13′ N. *a* majoris was observed at greatest elongation *E*. The Rt. As. is 10^h 56^m, dec. 62° 24′ N., and the sidereal time at noon 12^h 42′. Find the azimuth of the instrument, and the approximate time of observation.

7. Starting from *D*, a point on the 49th parallel, we follow a great circle 1° N of west. How many miles must we go before being again on the 49th parallel?

FACULTY OF PRACTICAL SCIENCE.

Physics I.

A. Dynamics and Properties of Matter.

1. Describe, with a diagram, the action of an aneroid barometer, and indicate its use in the measurement of heights.

2. Fifty cubic centimetres of mercury are poured into a barometer tube 100 cms. long (bore 1 sq. cm.). The open end is next closed by a finger and the tube inverted so that its "open" end is one centimetre below the surface of a dish of mercury. If the atmospheric pressure be 76 cm., how high above the surface of the reservoir does the mercury stand in the tube, after the removal of the finger?

3. The record baseball throw is said to be 400 ft. Assuming that the ball was thrown at the best possible angle, find its initial velocity.

4. The mass of an hydrometer is 25 gms. and the diameter of the graduated stem is 8 mm. What is the distance from the 1.00 mark to the 1.40 mark?

5. The larger piston of a hydraulic jack has a diameter of 3 inches. The pump piston is $\frac{1}{2}$ inch in diameter. If the arms of the pump-lever are 2 inches and 2 feet, find the mechanical advantage of the apparatus.

Also ANY TWO *of the following problems:*

6. A cylindrical boiler (6 feet in diameter) is made of $\frac{1}{2}$ inch material, the ultimate strength of which is 50,000 lbs. per sq. inch. If the seams have a strength 70% that

of the material, find the pressure required to burst the boiler.

7. A traction engine (wt. 5 tons) can haul 15 tons on the level. Find the net load it can haul up a 1% grade, if the coefficient of friction be 0·02.

8. What is the horse-power of a motor that can drive an 1800 lb. automobile up a 5% hill at 30 miles per hour, the frictional resistance being only 5 lbs. per ton? Wind resistance to be neglected.

9. An 1800 lb. automobile running at 10 miles per hour comes to the top of a 5% grade 500 feet long. Power is at once shut off and the car coasts to the bottom of the grade. Find the kinetic energy (*in foot-pounds*) at the bottom of the grade, if the frictional resistance be 6 lbs. per ton and if the wind resistance be neglected.

FACULTY OF PRACTICAL SCIENCE.

Physics I.

B. Heat, Light, Sound, Electricity, and Magnetism.

1. (*a*) Give a geometrical construction for finding the position of an image formed by a convex lens. (*b*) Indicate the position and nature of the images formed by the lenses of a microscope.

2. What are the differences between the spectra given by light from (*a*) an incandescent lamp, (*b*) a sodium flame, (*c*) the sun?

3. (*a*) Explain why light appears when a plate of crystal is placed between two crossed Nicol prisms. (*b*) What information does the fact of polarization give us concerning the nature of light waves?

4. How is the equation $pv = RmT$ derived? What do R and T mean?

5. A copper calorimeter weighing 36 grams (specific heat 0·1) contains 115 grams of water at 14·3° C. Steam is passed into the water until its temperature is 36·7°, and it is found that 4·4 grams of steam have been condensed. Calculate the latent heat of steam.

6. How is the relative humidity of the atmosphere calculated from an observation of the dew-point?

7. A negatively charged rod is held 4 cm. above the knob of an electroscope while the knob is touched with the finger. After the removal of the finger the rod is moved nearer to, and farther from, the rod. Describe and explain the behaviour of the gold leaf.

8. Describe the action of a "mouse mill" or "replenisher."

9. A zinc rod in a weak solution of $ZnSO_4$ is at a potential lower than that of the solution, while a copper rod in a solution of $CuSO_4$ is at a higher potential than the solution. What explanation is given?

10. A current of 0·1 ampere is passed through a solenoid and causes a deflection of 5° in a small magnet near one end. When a rod of iron is thrust into the solenoid the deflection of the magnet is increased to 50°. How do you explain the increased deflection?

11. (*a*) What is meant by "cross talk" in telephoning? (*b*) How is it caused and how prevented?

12. A millivoltmeter (0·8 Ω resistance) is shunted by a resistance of 0·01 Ω. What will it read when a current of 1 ampere flows through the system?

13. Write brief notes on (*a*) Doppler's principle, (*b*) musical scales, (*c*) beats.

FACULTY OF PRACTICAL SCIENCE.

Physics II.

[Candidates may take any six questions from section A and any four questions from section B.]

A.

(Any six questions.)

1. (*a*) What is meant by the potential of a conductor? (*b*) What are equipotential surfaces?

2. Describe in detail any form of amperemeter working on the principal of a "plunger" or "sucker" magnet.

3. A crystal of Cu SO_4 is but a very poor conductor of electricity. So also is pure water. Yet a solution of copper sulphate is a good conductor. Explain.

4. The coil of a D'Arsonval galvanometer (Ayrton-Mather type) is enclosed in a thin silver tube. (*a*) State why. (*b*) Explain the action involved. (*c*) Give other instances of the employment of the same phenomenon.

5. Describe the construction and action of a transformer. What are "step up" and "step down" transformers? Give an instance of the use of each.

6. It is required to construct a shunt to enable an amperemeter (resistance 0·18 Ω), of range 1 ampere, to read to 100 amperes. What should be the resistance of the shunt?

7. Write brief notes on (*a*) fundamental vibration, (*b*) Kundt's method of comparing the velocity of sound in various gases and under various conditions, (*c*) the method of measuring the velocity of sound in air by a tuning fork and resonating column.

B.

(Any four questions.)

8. (*a*) Prove that the acceleration of a body moving uniformly in a circle is $\omega^2 r$ towards the centre.

(*b*) A metal ball hanging by a thread (conical pendulum) is moving in a circle (n rotations per second) express the angle which the thread makes with the vertical, and the tension of the thread.

9. (*a*) Describe in general how the velocity of a piston differs from that of a body whose motion is simple harmonic.

(*b*) Find the relation between the pressure upon the piston and the twisting moment applied to the shaft.

10. (*a*) Show that the area of an indicator diagram measures the work done by the steam in a stroke.

(*b*) The scale of an indicator diagram is such that 1″ horizontally = 4″ stroke, 1″ vertically = 20 lbs./in.^{2} pressure. The area of the diagram is 6·21 square inches, diameter of piston 12″, stroke 14″, and the engine makes 240 rev. per minute. Find the indicated horse power.

11. In the two following cases state what measurements should be made, and what physical principles (equations where possible) should be used to make the desired calculations:

(*a*) A bullet is fired horizontally into a block of wood hanging by a string. Required the velocity of the bullet.

(*b*) A meteorite is found to have penetrated the earth to a certain depth. Required the velocity of the meteorite upon striking the ground.

12. (*a*) Define moment of inertia and write two

fundamental equations in which it occurs, giving one instance of the use of each.

(*b*) Two fly-wheels, exactly similar, the linear dimensions of one being double those of the other, are rotating with the same angular velocity. What is the ratio of their (1) masses, (2) radii of gyration, (3) moments of inertia, (4) kinetic energies.

13. (*a*) State how to measure the bending moment at any point of a loaded beam.

(*b*) Derive the equation $\rho = EAk^2/L$ for the radius of curvature of a rod at a point where the bending moment is L.

FACULTY OF PRACTICAL SCIENCE.

Physics III.

1. Describe with details, diagram of connections, and calculations, how you determined the temperature coefficient of the electrical resistance of copper.

2. Two types of dry cell are given you. How would you proceed to compare their electromotive forces?

3. What is meant by an "aperiodic" or "dead beat" instrument? Explain with examples two principles employed to secure this quality in galvanometers.

4. (*a*) Describe a quadrant electrometer and show how it is used.

(*b*) What forms of this instrument are found in engineering practice?

5. What is the resistance of a kilometre of copper wire of diameter 2 mm.? The specific resistance of copper is $1{\cdot}6 \times 10^{-6}$.

6. Describe any form of "hot-wire voltmeter."

7. (*a*) Why is it necessary to use high potentials in long distance power transmission?

(*b*) Why are telegraph relays wound to resistances of say 100 ohms while the local sounders are only of about 5 ohms resistance?

(*c*) Why are arc lamps for street lighting always designed with the positive carbon uppermost?

8. Write short notes on :—

(*a*) Magnetic storms.

(*b*) The "eleven year period."

(*c*) D'Arsonval galvanometers.

(*d*) Astatic galvanometers.

Experimental Physics.

1. Define simple harmonic motion. What are its properties? On what does the period depend?

2. State briefly the experimental evidence in favour of the belief that light consists of transverse waves.

3. Define the dew point and explain how to find the relative humidity and the mass of water vapour in a given volume of air.

4. Describe briefly three methods which have been used to measure the mechanical equivalent of heat.

5. How is the magnetic permeability of iron measured? Describe the phenomenon of hysteresis.

6. Describe the principal phenomena connected with the passage of a spark through a vacuum tube.

FACULTY OF PRACTICAL SCIENCE.

PRELIMINARY HONOURS.

Chemistry.

Crystallography.

1. Give the most general form of the monoclinic system and show how the other holohedral forms of this system may be derived from it.

2. In the triclinic system explain the series of forms the faces of which are parallel to the brachydiagonal.

3. Give the limiting forms of (*a*) the trisoctahedron, (*b*) the icositetrahedron, (*c*) the tetrahexahedron. Write Weiss' and Naumann's symbols for each form.

4. How do the faces of the following forms affect one another in combination:

(*a*) Hexagonal pyramids of the first and second orders.

(*b*) Orthorhombic prism and brachypinacoid.

(*c*) Rhombic dodecahedron and icositetrahedron.

5. Give Weiss' and Naumann's symbols for the fundamental form in each of the six crystal systems.

6. Give the forms produced by rhombohedral hemihedrism in the hexagonal system.

FACULTY OF PRACTICAL SCIENCE (COURSE E).

Chemistry of Explosives and of Cements.

1. Give in detail the preparation of any *one* of the constituents of gunpowder.

2. How is nitroglycerine manufactured? What are the products of its explosion?

3. Taking the sp. gr. of fulminate of mercury as 4.4 calculate the pressure produced by its explosion, the temperature being assumed to be 1500° C.

4. Discuss the process of setting and hardening of plaster of Paris and of mortar.

5. Discuss the conditions that affect the slaking of lime.

6. Describe the different classes of complex (or siliceous) cements, especially the material and manner of burning.

FACULTY OF PRACTICAL SCIENCE.

Physical Chemistry II.

1. The molecular conductivity of a 5 % solution of potassium chloride is given as 93×10^{-7} when the specific resistance is measured in terms of the metre and the square millimetre and the concentration in gramme molecules per litre; what would it be when the specific resistance is measured in terms of the centimetre, and the concentration in gramme molecules per cubic centimetre ?

2. What is meant by saying that the mobility of the hydrogen ion is 314 and of the hydroxyl ion 172? The conductivity of water being 386×10^{-10} calculate the degree of dissociation.

3. How is the measurement of electromotive force used to determine the solubility of a difficultly soluble salt or the degree of dissociation of a slightly dissociated double salt, for instance the solubility of silver chloride or the number of silver ions in the double cyanide ?

4. How is Meyer's concentration cell a means of proving that the molecule of zinc in dilute amalgam consists of one atom ? Show that the concentration cell in action tends to become cool unless the heat of solution of a metal from the more concentrated amalgam is greater than the heat of solution from the less cencentrated amalgam.

5. Give Nernst's calculation of electromotive force in terms of the osmotic pressure of two electrolytes of differ-

ent concentration with electrodes of the same kind, the transport numbers being supposed known.

6. Discuss the electrolytic refining of copper and the electrolytic deposition of brass.

7. Describe the normal electrode and show how it may be used to show the difference of potential between another electrode and an electrolyte.

8. Discuss abnormal transport numbers.

FACULTY OF PRACTICAL SCIENCE.

Elementary Mineralogy and Blowpipe Analysis.

1. Make diagrams showing cross and vertical sections of the fixed forms of the isometric system, giving Naumann's symbols in each case.

2. Sketch the crystals submitted, letter the faces, name the forms present and write Naumann's symbols for the forms.

3. Describe fully :

(*a*) Three minerals used as ores.

(*b*) Three minerals occurring as gangue.

(*c*) Three rock-forming minerals.

(*d*) Three accessory minerals.

4. Describe a Carlsbad twin.

5. Determine the numbered specimens by means of the blowpipe and the lettered specimens by field tests.

FACULTY OF PRACTICAL SCIENCE.

Systematic Mineralogy.

1. Name the forms present on the crystals submitted, giving Naumann's symbols.

2. Describe any method of twinning in the Hexagonal system.

3. What is meant by the index of refraction in minerals? How is it determined? Of what use is it in mineralogy?

4. Show by diagrams how sections must be cut from a monoclinic crystal to determine the optical properties of the mineral.

5. A vertical section of an isodiametric mineral is placed in the petrographical microscope between crossed nicols in parallel polarized light and the stage revolved. Describe the phenomena that occur.

6. Describe any case of "imperfection in the faces of crystals."

7. Write notes on "colour in minerals."

FACULTY OF PRACTICAL SCIENCE.

PRELIMINARY HONOURS.

Systematic Mineralogy.

1. Describe the triclinic axial system.

2. Explain the use of Thoulet's solution in determining the specific gravity of minerals.

3. What are the physical constants of the mineral orthoclase?

4. A quartz wedge is inserted at the 45° position between the crossed nicols of the polarising microscope. Describe and explain the phenomena that occur when the wedge is pushed forward, (*a*) for monochromatic light, (*b*) for white light.

5. What is meant by + and — isodiametric minerals? Show how (*a*) the quarter undulation mica plate and (*b*) the gypsum plate is used to determine the character of the mineral.

6. Show how the index of refraction is determined from a crystal of an orthorhombic mineral.

7. In an ordinary thin section explain how the index of refraction is obtained.

8. Write notes on the magnetic properties of minerals.

FACULTY OF PRACTICAL SCIENCE.

Optical Mineralogy.

1. In the mineralogical description of barite the following terms occur:

(*a*) Cleavage: *c* perfect: *m* also perfect: also *b* imperfect.
(*b*) Optically +.
(*c*) Ax. pl. ‖ *b*.
(*d*) Bx ⊥ *a*.
(*e*) $2E_y = 63° 5'$.
(*f*) $\beta_y = 1{\cdot}6371$.

Explain these terms, using diagrams.

2. By means of the petrographical microscope how would you distinguish between minerals of the tetragonal and hexagonal systems on the one hand and those of the orthorhombic system on the other?

3. A mineral in a section under the microscope is suspected to be a monoclinic pyroxene. Explain how you would proceed to examine it, and the results you might expect.

4. Make diagrams (using ruler) of five different sections through a monoclinic crystal, state the direction, giving Naumann's symbols in each case.

5. Explain the *practical* use of the dichroscope.

6. Give with Naumann's symbols the domatic forms of the triclinic system.

FACULTY OF PRACTICAL SCIENCE.

Descriptive and Determinative Mineralogy.

1. By means of crystalline form distinguish between (*a*) pyrite, arsenopyrite and marcasite, (*b*) tourmaline and actinolite, (*c*) pyroxenes and amphiboles, (*d*) cuprite and pyrargyrite.

2. Describe *in detail* the following minerals: (*a*) Kaolin, (*b*) jasper, (*c*) nepheline, (*d*) flint, (*e*) talc, (*f*) chert, (*g*) serpentine, (*h*) glauconite.

3. Give chemical composition and name of all minerals containing silver.

4. Describe *fully* (*a*) a mineral ore, (*b*) a rock-forming mineral, (*c*) a gangue mineral, (*d*) an accessory mineral. The minerals selected must not appear in the answer to another question.

5. Give the optical properties of any mineral not belonging to the isometric system.

6. Determine the numbered minerals by the blowpipe and the lettered specimens by field tests.

FACULTY OF PRACTICAL SCIENCE.

FINAL HONOURS.

Mineralogy.

Descriptive and Determinative Mineralogy.

1. Select *one* mineral from the following list and describe it *in detail*: (*a*) quartz, (*b*) calcite, (*c*) fluorite, (*d*) pyrite, (*e*) tourmaline, (*f*) muscovite, (*g*) scapolite.

2. Select any mineral group containing not less than five minerals and describe the group fully.

3. Give the various silicic acids found in minerals and the composition and crystalline form of three prominent minerals for each acid.

4. By optical methods show how you would distinguish between the pyroxenes and amphiboles.

5. Give in detail the crystallography of orthoclase.

6. Classify the sulpho-salts.

7. Select three prominent accessory minerals not spoken of in the previous questions and describe their occurrence.

8. Give Ontario localities for the following minerals: (*a*) galenite, (*b*) talc, (*c*) magnetite.

FACULTY OF PRACTICAL SCIENCE.

PRELIMINARY HONOURS.

Mineralogy.

Crystallography.

1. Sketch the 5 crystals submitted, letter the faces, name the forms by reference to the letters and write Miller's symbol for each form.

2. Explain the twinning laws of the 5 specimens submitted.

3. Explain the distortion in the cases of the 5 specimens submitted.

4. Show how the axial ratio is obtained for tetragonal crystals.

5. Show how the adjacent polar edges of the ditetragonal pyramid cannot be equal to one another.

6. Give with Naumann's symbols the simple forms of the triclinic system.

7. What is meant by rhombohedral tetartohedrism?

FACULTY OF PRACTICAL SCIENCE.

Pass Geology and Geology I.

1. Discuss the causes, movement, and geological effects of earthquakes.....*10*

2. Distinguish between plutonic, dyke, and volcanic rocks. Note their chief characteristics and name three examples of each.....*10*

3. Define the following: Tufa, breccia, conglomerate, amygdaloid, phenocryst, fault, essential-constituent, kaolin, argillaceous, anticline.....*10*

4. Trace the action of rain water from the time it leaves the clouds till it reaches the ocean.....*15*

5. Discuss fully the means by which limestones are formed.....*10*

6. By what methods can the age of the earth be approximately determined?.....*10*

7. To what uses can the study of paleontology be put?.....*10*

8. Classify vertebrate life, giving two extinct examples of each, and the geological age to which each belonged.....*10*

9. Describe by word or diagram the following fossils, giving the age to which each belonged: Diplograptis, lingula acuminata, halysites, murchisonia, zaphrentis, asaphus canadensis, stigmaria, orthoceras, calamite, ammonite, spirifera mucronata, arthrophycus, favosites, bacculite, sigillaria.....*15*

FACULTY OF PRACTICAL SCIENCE.

Economic Geology I.

1. A mineral vein striking north 30° west and dipping 40° east, encounters an east and west fault with a dip of 60° to the south. Point out the direction in which you would first crosscut to pick up the dislocated end of the vein.

2. State the modes of occurrence of tin ores and name their characteristic mineral associates. What bearings has the occurrence of tin on theories regarding the origin of ore deposits?

3. How may the formation of shoots of ore in a vein be accounted for?

4. In what ways do ore deposits find accommodation for themselves in the solid crust of the earth?

5. Discuss fully the action of surface geological agencies on ordinary copper deposits.

6. Describe the types of deposits formed of mechanical detritus and mention ores usually found in these forms.

7. Give the classification that has recently been proposed for the Pre-Cambrian rocks of the Lake Superior region. In which of the sub-divisions are the iron ores now being mined in the United States and Canada? State the chief characteristics of each of these sub-divisions.

8. Draw up a list of ores and economic minerals believed to be of igneous origin. Give briefly the arguments which have been advanced in support of this mode of origin, for each mineral or ore mentioned by you.

9. State the characteristics of the deposits in each of three of the most important copper-producing areas of North America.

FACULTY OF PRACTICAL SCIENCE.

Geology of Canada and Geology II.

1. Compare the archean of Eastern Ontario with that of Northern Ontario. Mention particularly likenesses and differences.

2. Describe the area in Quebec lying south of the St. Lawrence River, mentioning its economic products.

3. "Oil has been found in the following formations: Trenton, Utica, Hudson River, Niagara, Guelph, and Corniferous." Discuss fully how you would recognize these formations.

4. Discuss the gold-bearing area of Nova Scotia.

5. Of what age are the coal-bearing formations of Western Canada, and what fossils would you expect to find in them?

6. Write full notes on the "Interior Plateau" of British Columbia.

7. Discuss glaciers under the following heads: Causes, fissures, moraines, regellation theory of flow, retreating stages.

8. State the theories held regarding the nature of the earth's interior, and discuss any one of them fully.

9. Discuss the sources of the heat and force necessary for the production of volcanic eruptions.

FACULTY OF PRACTICAL SCIENCE.

Geology III.

FIRST PAPER.

1. State how you would distinguish between aeolian, lacustrine, fluviatile, and glacial deposits.

2. Show how the physiography of a district is in a sense its written history.

3. Sketch the work of ice as a geological agent.

4. Describe pelagic deposits.

5. Write notes on the effects of pressure upon rocks.

6. Discuss mountain-forming movements under the heads, cause and effect.

FACULTY OF PRACTICAL SCIENCE.

Geology III.

SECOND PAPER.

[Seven questions will constitute a full paper.]

1. Write a short paper on the developement of Glacial Geology.

2. Outline the services rendered to geology by Jean Etienne Guettard.

3. Discuss Lyell's influence upon geological thought.

4. Explain how you would work out the geological record.

5. Draw a small geological map showing your supposed traverses by dotted lines and construct a section through the centre.

6. Describe the nature and modes of formation of soils.

7. Mention facts proving the former existence of volcanoes in Ontario.

8. Illustrate the developement of life as revealed by palaeontological evidence by discussing the history of mammalia from the beginning of the Mesozoic.

FACULTY OF PRACTICAL SCIENCE.

Petrography I.

1. Give examples of plutonic rocks in which each of the following minerals occurs as an essential constituent : (*a*) Augite, (*b*) hypersthene, (*c*) olivine, (*d*) orthoclase, (*e*) nepheline, and state common accessory constituents of any two of the rocks named by you.

2. State, using examples, the usual order in which the constituents of rocks crystallize from a molten magma, and give examples in which the order has not been followed.

3. Define the following terms : Uniaxial, axial plane, extinction argle, aphanitic, isotropic.

4. How can the following be distinguished optically : Diallage and tremolite, biolite and hornblende, quartz and orthoclase, magnetite and spinel ?

5. Discuss regional metamorphism, and give four examples of rock types that result from it.

6. Discuss fully the diorite family of rocks.

7. Describe (*a*) the use of heavy solutions in rock analysis, (*b*) the use of microchemical tests.

8. Define the following terms : Amorphous, idiomorphic, porphyritic, gneissoid, pegmatitic.

9. Discuss the relationship existing between shales, slates, and schists.

10. Determine by megascopic tests the hand specimens labelled A, B, C, D, E, F, and by microscopic tests the sections 1, 2, 3, 4, 5, 6.

FACULTY OF PRACTICAL SCIENCE.

Petrography II.

1. Give a list of rock-forming minerals found (*a*) *only* in eruptive rocks, (*b*) *only* in rock of aqueous origin, (*c*) common to both classes of rocks.

2. Describe the nature and origin of separation planes found in rock-masses.

3. Give the normal order of crystallization of minerals in rocks and explain how exceptions to this may arise.

4. Enumerate the principal modifications of texture in igneous rocks and discuss the use of these in rock classification.

5. Write a short paper on granites.

6. A granitic rock has the following composition : SiO_2 56.71, Al_2O_3 22.42, Fe_2O_3 1.82, Fe O 0.80, MgO 1.19, Ca O 2.22, Na_2O7.37, K_2O5.87, H_2 O 0.45. Give its probable mineral composition and name the rock.

7. State fully the respects in which gneisses differ from eruptive rocks, showing how they may be distinguished from them.

8. Describe the usual forms of alteration of the constituents of a gabbro.

9. Give a petrographical description of the Archean north of Kingston.

FACULTY OF PRACTICAL SCIENCE.

Mining—Third Year.

[Write concisely and illustrate.]

1. What are common mineralogical and geological associations of the following deposits: Mica, asbestos, copper sulphides, lead and tin, and what sort of an outcrop would they be likely to give?

2. Give four common changes in ores and values which are caused by surface alteration and try to account for them.

3. The strike of a coal seam is south, the dip is 60° west. This observation is made on a hillside which slopes 30° southwards. At a point 600 feet lower down it is desirable to run a tunnel in on the seam. Plot as correctly as you can the point to start this tunnel and the course of the concealed outcrop. Also calculate the deflection from the strike you would have to make in order to follow down the outcrop. Cos 30° and sin 60°=·866.

4. Compare the work, cost, uses, and advantages of a long distance percussion drill, and a diamond drill; or *alternatively*. Describe and illustrate examples of these two kinds of drills, explaining briefly their operation.

5. How would you proceed to develope a prospect for a company which has a 6 months' option to purchase. Take any ore body and conditions you like.

6. Describe carefully some method of sinking through watery strata, and tunnelling through running ground.

7. Describe and illustrate the common power drill : also some variety of electric rock-drill.

8. Make a diagram of any piece of ground to be excavated and show how you would place your holes, load and fire them. Give dimensions.

9. Choose your own type of ore body, wide or narrow, steeply inclined or not, and show how you would develope and stope it out.

FACULTY OF PRACTICAL SCIENCE.

Mining—Fourth Year.

[NOTE.—Write concisely and illustrate. Answer any 7 questions, including 4 and 5.]

1. State what you know about the uses and application of electric, steam and compressed air locomotives for underground work.

2. A stope 100′ long, 80′ high, 12′ broad is timbered with square setts at 10 cents per running foot of timber. Compare this cost per ton of ore raised, with waste filling at 25 cents per ton. The ore is a common sulphide ore, and the waste is rock.

3. Describe carefully the merits, conditions and running of some type of aerial tramway.

4. In a vertical shaft 1000′ deep, giving reasonable dimensions, speed, and weights for the load, calculate approx the H.P. required for unbalanced hoisting. Compare it with the same factors used on a 60° slope 1000′ long.

4. (*a*) *Or alternatively*, what form of hoisting gives the most steady lead on the engines? Describe and work out a case demonstrating it.

5. What H.P. pump using a 6-inch delivery pipe for a 200′ lift would be equivalent to a wooden trough of dimensions $1' \times 1'$ running full on a 2% grade?

5. (*a*) *Or alternatively*, describe carefully two methods of draining mines.

6. Under what various conditions is placer gold found?

Describe briefly two common methods of obtaining and saving it.

7. How is sufficient air supplied to a gassy coal mine? Describe the methods of distributing and measuring this air supply.

8. What are the dangers of lights, flame, and spark in a coal mine, and how are they reduced in practice?

9. State what you know about wages, contracts, leases, tribute, and accidents in mining.

10. Give what you think are the 6 first considerations in the examination of a prospect, or alternatively of a mine.

FACULTY OF PRACTICAL SCIENCE.

Ore Dressing.

1. Discuss the operation of hand-picking ores, (*a*) underground, (*b*) on the surface. Mention when and how it would be advisable to carry on the work.

2. Sketch a conical rock crusher of the Gates type, showing the adjustments and how the wearing parts may be replaced. What is the minimum diameter of a set of rolls that will crush 2″ rock down to ½″ size when the ∠ of friction $\theta = 16°$, $\cos\theta = \cdot 96$.

3. Sketch a modern stamp-battery, naming the different parts and showing how the wearing parts may be replaced and methods of adjustment. What would be the maximum number of drops per minute obtainable with a stamp falling 10″, the cam lifting at the rate of 2 5′ per second? $t = \sqrt{\frac{2h}{g}}$.

4. Describe the operation of hand-sampling, and compare the advantages with mechanical sampling. Describe some machine adapted to the latter work.

5. Why are ores before concentration on a jig or table sometimes subjected to hydraulic classification? When would it be advisable to grade by screens? Given the sp. gr. of cassiterite as 6·5 and quartz 2·6, what would be the size of the latter mineral equal falling with a piece of cassiterite of ·5 mm. in diameter according to Rittinger's formula $V = 2\cdot 44\sqrt{D(\delta - 1)}$?

6. Describe a jig of the Collom type, showing how it

may be run to make hutch, coarse concentrates, and tailings, or tailings and either hutch or concentrates. In modern jigs how has the plunger mechanism of the Collom been replaced to advantage?

7. Give the theory of the separation of concentrates from tails on the Frue vanner and wilfley table; and mention the various adjustments of both these concentrators.

8. Describe magnetic concentrators suitable for the following classes of work: (*a*) To concentrate dry an ore containing magnetite crushed to about 1″, (*b*) concentrating wet, comparatively fine magnetite, (*c*) separating weakly magnetic zinc blende from galena.

FACULTY OF PRACTICAL SCIENCE.

Contracts and Agreements for Sale.

1. What is necessary to render binding a promise to sell?

2. From what time does the acceptance of a promise bind the promissor, and what is essential to make the acceptance binding?

3. What will nullify the acceptance of a promise?

4. What are the essential elements of a license to mine?

5. Give the form of words in which Mines and Mining Rights are usually described in deeds and contracts.

6. By what proceeding under the Land Titles Act may a prospector give notice of a claim founded upon a letter from the owner.

7. How should chattel property belonging to a mining plant be described in a conveyance of a mining property, and what enquiries should be made into the title to such chattels.

FACULTY OF PRACTICAL SCIENCE.

MINING LAW.

INVESTIGATION OF TITLE TO MINING PROPERTY.

1. Mention the various searches and heads of inquiry into the title to Mining property.

2. What are the reservations in favor of the Crown in sales of Mining lands in Ontario?

3. What are the conditions upon which sales or leases of such property are made?

4. In the Letters Patent incorporating a Joint Stock Mining Company in Ontario, what is the nature of the forfeiture relating to lands of the Company.

5. State the course of an enquiry into the boundaries of a mining property?

6. In the event of dispute as to the sufficiency of the evidence of length of possession and other particulars of title what course may be taken for having such matters investigated?

FACULTY OF PRACTICAL SCIENCE.

Joint Stock Mining Companies.

1. How are such Corporations created? and for what objects?

2. State some of the distinguishing characters of partnerships and Joint Stock Companies.

3. Mention some provisions of the Ontario Companies Act for the regulation of the internal affairs of Companies.

4. What is a proxy and how created.

5. What are the incidental powers conferred on Companies by the Act.

6. How are the duties and conduct of directors and officers of Companies regulated.

7. What special powers concerning the issue of stock are conferred by the Act respecting the Incorporation of Mining Companies.

The Mines Act.

1. What are the principal duties of Mine Inspectors under this Act relating to mining development?

2. State the principal conditions to which holders of mining locations must conform, and what are the consequences of neglect of them?

Fraud and Misrepresentation.

1. Define actionable fraud.

2. What effect has misrepresentation upon the liability of a party who has been led to enter into a contract on the faith of such misrepresentation?

3. Are companies liable for the fraudulent representation of directors?

4. In what cases are Directors and promoters not liable for untrue statements in a prospectus or notice published by the Company.

FACULTY OF PRACTICAL SCIENCE.

Metallurgy I.

1. Define and explain calorific power, calorific intensity, large caloric, British thermel unit, heat of formation of a chemical compound, endothermic reaction, pyrometry.

2. Assuming the calorific power of C burnt to CO_2 = 8080 calories, and that CO burnt to CO_2 = 2400, what is the heat of combustion of C burnt to CO in B.T.U.? What is the heat of formation of CO_2? What is the calorific intensity of C burnt to CO_2 in O when the Sp. Ht. of CO_2 = .22? Why is this not attainable?

3. Compare the early form of the Siemens' producer with modern gas producers of the Dawson, Dellwick-Fleischer and Loomis Pettibone types in efficiency, calorific power of the gas produced, and methods of operating, the producer as regards blowing, removing ash, etc.

4. Sketch and describe a blast furnace, an ordinary reverberatory furnace, a Siemens' regenerative furnace, and tell which of the following fuels could be employed in each case: Wood, anthracite, coke, crude oil, producer gas.

5. Describe the operation of making steel from pig iron, (*a*) in the open hearth, (*b*) in the Bessemer converter, showing how C, Si, and P may be removed.

6. Trace the effect of C on iron from mild steel

through the steels and white and grey pig-irons. What are the effects of Si, P, S, and Mn on steel and pig-iron ?

7. Describe the operation of smelting copper ores to form matte. What slags will be employed, and what are the requisite properties of a good slag for copper work ?

FACULTY OF PRACTICAL SCIENCE.

Metallurgy II.

1. How would you test a gold ore to determine if it was adapted to cyanide treatment? Describe a method of cyaniding slimes, (*a*) when the slimes are low grade, (*b*) when they are fairly high grade.

2. When may it be advisable to treat an ore by chlorination instead of cyanide, and when would smelting be preferable? Describe the preparation of an ore for chlorination and the various methods of precipitating the gold from solution, comparing the relative advantages of these methods.

3. How would you advise treating a lump ore assaying 8%Cu, 15%S, 20%SiO_2, 10%CaO, 40%FeO? Calculate what flux and how much would be required. Approximately how much fuel would be needed.

4. Describe the operation of converting a 50% copper matte into crude copper, giving chemical reactions, etc. Sketch the converter and show how it is relined. What grades of matte can be successfully converted?

5. What classes of lead ores are adapted to (*a*) reverberatory smelting, (*b*) blast-furnace smelting? Describe the operation in the former case, giving chemical reactions.

6. Trace the chemical change in the charge of an iron blast-furnace from the top downwards and from the tuyere level up, and show how the character of the iron manufactured is influenced by (*a*) hot blast, (*b*) kind of

slag produced, (*c*) composition of ores charged, (*d*) light or heavy burden.

7. Work out the blast-furnace charge for 10,000 lbs. of coke with the following ores: (*a*) Fe 50%, SiO_2 12%, Al_2O_3 8%, CaO 3%, P ·8%, (*b*) Fe 40%, SiO_2 15%, Al_2O_3 10%, CaO 5%, when it is required to make a pig-iron containing Fe 93%, C 3·5%, Si 2·6%, P 1·0%, S trace; with coke containing 10% ash, the ash assaying SiO^2 40%. Al_2O_3 40%, S 15%, bases 5%, using limestone containing only 96% $CaCO_3$, and 4% of SiO_2 and Al_2O_3. The slag required should contain 46 parts of acids to 52 of bases.

8. How does the amount of C present affect steel with regard to (*a*) its physical properties, (*b*) its commercial uses? Describe the production of a steel rail from liquid pig-iron by the Bessemer process.

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Metallurgy III.

[Students in Electro-Metallurgy omit questions 1 and 2.]

1. How and to what extent do the following impurities in zinc ores effect their metallurgical treatment: Fe, Pb, S, SiO_2, CaO, Au., Ag.?

2. Describe the operation of producing zinc in a modern gas-fired Belgian furnace.

3. What will be the voltage required to decompose cupric chloride $Cu\ Cl_2$, when the heat of formation of one gram molecule 134·5 grams=51·63 large calories and 96,540 coulombs of electricity will liberate one chemical equivalent weight in grams (i.e., 35·5 G of Cl)? What will be the voltage required to decompose cuprous chloride $Cu_2\ Cl_2$, when its heat of formation is 65·76 cal? One joule= 00024 large calories.

4. Describe the operation of refining copper electrolitically and show why it is sometimes advantageous to work with a high current density, say 40 amp. per sq. ft.

5. Describe the main features of the ordinary commercial process of recovering aluminum from its ores. Why is it not feasible to decompose aluminum salts in aqueous solutions?

6. How is pig-iron produced in the Keller electric furnace? What are some of the advantages of the electric furnace over the ordinary processes for the production of iron and steel?

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The Uses of Explosives.

1. What two general groups are explosives divided into? Give an example of each.

2. What is the true test for safety for dynamite.

3. What are the different kinds of electric fuses in use? With what kind of fuses can the circuit be tested, and how may the testing be done?

4. What advantage is obtained by firing a number of shots simultaneously with a battery over firing them individually?

5. In open blasting what relation should the depth of the face bear to the distance apart of the holes, and also to the distance of the holes back from the face of quarry?

6. In excavating a sewer trench in tough hard rock how would you charge and tamp the holes.

FACULTY OF PRACTICAL SCIENCE.

Thermodynamics I.

1. A gas expands at a constant pressure of 2000 pounds absolute on the sq. ft. from a volume of 10 cu. ft. to a volume of 20 cu. ft. Find the heat added, the change in intrinsic energy and the work done.

2. A Carnot engine working with air rejects 10 units of heat per cycle at 100° F. Its efficiency is 15 per cent. How much work is done and how much heat is supplied? At what temperature is the heat applied?

3. How much heat must be added to three pounds of water at 65° F. to make it into steam at 105.3 lbs. gauge and primed 20 per cent.? What is the increase of intrinsic energy of the steam over the water?

4. A steam engine working with Carnot's cycle evaporates water at 320° F. and expands to a pressure of 17.5 lbs. absolute. Calculate the water used per I.H.P. per hour.

5. Design a single cylinder air compressor to deliver 1000 cu. ft. of air per minute at 80 pounds per sq. in. gauge pressure. What H.P. steam cylinder will be required to drive it?

6. The cylinders of a compound engine are 10″ and 20″ in diameter, the stroke being 4 ft. Cut off on the high pressure cylinder occurs at one-quarter stroke. Determine the total expansion.

7. A single cylinder steam engine takes steam of 70 lbs. gauge pressure, the back pressure being 6 lbs. gauge.

Calculate the work done per lb. of steam used, the steam consumed per I.H.P. per hour, and the thermodynamic efficiency.

8. Steam at 150 lbs. gauge pressure is throttled to atmospheric pressure and the temperature is then 221° F. Calculate the percentage moisture in the steam.

9. Discuss fully the advantages and disadvantages of compounding.

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Thermodynamics II.

1. Given for saturated steam that the temperature is 379° Fahr. when the pressure is 194 lbs. absolute, and the temperature is 380·7° when the pressure is 198 lbs., calculate the volume of 1 lb. of saturated steam at 196 lbs. pressure.

2. Steam at 150 lbs. gage pressure and superheated 100 Fahr. is expanded adiabatically to 2 lbs. absolute, following Clausius' cycle. Determine (*a*) the pressure at which it will be saturated, (*b*) the dryness at the end of expansion, (*c*) the work done per lb. of steam, and (*d*) the thermodynamic efficiency.

3. Sketch the $\tau - \varphi$ diagram (indicating how it is obtained) for an ordinary gas engine for which the cycle is, (*a*) adiabatic compression, (*b*) heat taken in at constant volume, (*c*) adiabatic expansion, (*d*) heat rejected at constant volume, (*e*) heat rejected at constant pressure.

4. A $10'' \times 12''$ engine running at 300 R.P.M. cuts off at $\frac{1}{4}$ stroke with steam at 100 lbs. absolute and back pressure at 16 lbs. absolute. The clearance is 10% of the piston displacement. Calculate the steam used per I.H.P. hour when the compression is carried (*a*) to 50 lbs., and (*b*) to the initial pressure.

5. Point out and discuss the defects in the valve gear of the engine from which the cards presented were taken. What changes would you suggest?

6. Discuss the advantages and disadvantages of the high speed engine.

7. A refrigerating machine using ammonia with cold compression is required to produce per hour 3 tons of ice at 20° Fahr. from water at 70°. Determine (*a*) the volume of the compressor cylinder (double acting) if the speed is 60 R.P.M. and the efficiency of refrigeration 75%; (*b*) the I.H.P. in the steam cylinder if the mechanical efficiency of the compressor is 82%; and (*c*) the quantity of ice per I.H.P.-hour. Assume the pressure in the cooler to be 160 lbs., and in the brine tank 40 lbs. absolute. The index of the compression line is 1.05.

8. A single stage turbine operates with steam at 140 lbs. absolute and superheated 50°. The condenser pressure is 2 lbs. The coefficient of velocity for the nozzles is ·85. $\gamma = 25°$. $\alpha = 2\beta$. Determine (*a*) the speed of the blades for maximum efficiency, (*b*) the efficiency, and (*c*) the steam used per I.H.P. per hour.

9. A $16'' \times 30'' \times 42''$ Corliss engine is to run at 75 R.P.M. with steam at 110 lbs. gage pressure and a vacuum of $27''$. The drop into the receiver is to be 12 lbs., and into the condenser 4 lbs. The work is to be evenly divided between the cylinders. Determine (*a*) the point of cut-off in each cylinder, (*b*) the receiver pressure, and (*c*) the I.H.P. $e_1 = e_2 = e = \cdot 88$.

FACULTY OF PRACTICAL SCIENCE.

General Engineering I.

1. A steel rail 30 ft. long weighs 100 lbs. per yard ; make the necessary assumptions and determine the elongation of the rail due to a range of temperature from —20° F. to 100° F. If at the lower temperature the rail were placed between two immovable blocks so as to prevent elongation, and were prevented from bending, what would be the pressure exerted on the blocks at the higher temperature ?

2. A cast-iron beam of I. section 12 ft. long and 12 in. deep rests upon supports at the ends. The upper flange is 6 in. wide and the lower 10 in. wide. The flanges and web are each 2 in. thick. (*a*) What uniformly distributed load will rupture the beam ? (*b*) What are the maximum stresses in the upper and lower flanges just before rupture ?

3. Derive Gordon's formula for the strength of columns.

4. A rectangular timber strut 4 in. by 6 in. in section and 6 ft. long is subjected to a compression of 14,400 lbs.; determine the diminution of the length. What would be the probable safe load with both ends hinged ?

5. Find the proper thickness of a cast-iron water main 12 in. in diameter inside, to stand an interior pressure of 300 lbs. per sq. in., with a factor of safety of 10.

6. A timber beam 6 in. by 8 in. and 6 ft. long bears a weight of 1000 lbs. at the centre. Compare the strength

and stiffness when the beam is laid on edge with the strength and stiffness when the beam is laid flat.

7. The bottom chord ABCD of a truss for a highway bridge consists of three panels, AB, BC, CD, of 16 ft. each; the top chord has 1 panel EF=16 ft.; the uprights EB and FC are each 16 ft.; EC and BF are counters and AE and FD inclined hip members. Assuming a dead load of 800 lbs. per lin. ft. and a live load of 2000 lbs. per lin. ft., sketch the stress diagrams, and determine the maximum stresses in all the members.

(N.B.—Not more than 200 words to be used in answering each of the 3 following questions.)

8. How should a specimen of granite be prepared for a crushing test, and what would be the behaviour of the specimen under the test?

9. How are the proper proportions of cement, sand, and stone for concrete determined? In a concrete of 1, 2, 5, without excess of cement, what were the probable voids in stone and sand?

10. Name the different processes of manufacturing steel for structural purposes, and indicate the properties of each product.

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General Engineering II.

1. A 12 in. steel I-beam weighs 40 lbs. per ft. Its moment of inertia is 268·9 about an axis perpendicular to the web at centre, and is 13·8 about an axis coincident with centre line of web. Two such I-beams are latticed together to form a column. Find the proper distance centre to centre, neglecting the area of latticing.

2. Find the safe load for a column 20 ft. long built of the two I-beams of question 1 when both ends are hinged.

3. A short bar of steel is subject to repeated stresses ranging from 25,000 lbs. compression to 100,000 lbs. tension; what should be the area of its cross section for a factor of safety of 4?

4. A wooden beam 15 ft. long 18 inches deep and 12 in. wide is loaded uniformly with 500 lbs. per lin. ft. Find the deflection at the centre and at a point 5 ft. from the left support. $E=1,200,000$.

5. In the beam of question 4, what load at the centre would strain the beam to the elastic limit, and what would be the deflection under the load?

6. A continuous beam 24 ft. long spans 3 openings of 8 ft. each. Under a uniform load of 300 lbs. per lin. ft. find the points of maximum shear and maximum bending moment, and also the proper dimensions of the beam, allowing 800 lbs. per sq. in. as the allowable safe stress.

7. A concrete dam of triangular section, 90 ft. high, and 60 ft. wide on the base, with up-stream face vertical, rests on a foundation block of rectangular section 75 ft. wide and 40 ft. deep, the offsets being 5 ft. up-stream and 10 ft. down-stream. Find the position of the line of resistance, and the maximum pressure at top and bottom of foundation, both when reservoir is full and when it is empty. Wt. of concrete, 140 lbs. per cu. ft.

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Municipal Engineering.

1. Give reasons why the tee rail is to be preferred to the girder or tram rail, both from the street railway and the municipality's point of view.

2. What action takes place in sewage in a stone sewer with a flat bottom or floor on a grade of 1 foot in 100 ?

3. In designing a system of sewers for the purpose of drainage, what are the principal conditions to be considered ?

4. Describe a two level distribution system of water supply.

5. Describe in detail the laying of a 10-inch water main from breaking of ground to the resumption of traffic on the street.

6. Describe the construction of street surface 66′ wide from property line to property line, with cement sidewalks 5 feet wide combined with curb, travelled roadway 32 feet wide and laid with granite blocks. Ground fairly level.

FACULTY OF PRACTICAL SCIENCE.

Railway Engineering I.

1. Describe the work that an engineer should do upon first taking charge of a residency on construction.

2. Describe a progress or monthly profile.

3. If a revision in the location is made and station 788 + 44·3 on the new line equals station 791 + 60·3 on the old line, what is the length of the short or long station, and where does it begin and end ?

4. State where cross sections should be taken, both in cuts and fills.

5. Describe clearing, and state the regulations that must be enforced.

6. Describe how your notes should be kept in cross sectioning an embankment that is to be built from side ditches that are regular in section and have no water lying in them.

7. Describe what the plans and profiles shall show and what the book of reference shall contain that have to be deposited with the Minister of Railways and Canals before work of construction may proceed.

8. How may the location of a mine in operation affect the location of a railway ?

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Railway Engineering II.

Construction.

1. In designing a culvert, upon what does the area of the water way required depend ?

2. Describe the construction of a 24″ sewer pipe culvert under a 10′ embankment and state what precautions are to be taken for its protection.

3. Describe driving a 30′ pile in sandy soil by means of a water jet.

4. Describe driving a 30′ pile in blue clay where heavy hammering is not permissible.

5. Describe a method of building a reinforced concrete pile in place, top of pile to be 4′ above water level, then 6′ of pile in water, then 2′ in silt, then penetrating 12′ of hard clay.

6. Sketch roughly a frame trestle bent 14′ high resting on a pile foundation, showing cross section of deck, and name each part.

7. Describe how you would put on a ballast floor on a low frame trestle.

8. Describe the classification of excavation.

9. In cuttings that are wet and spongy from ground flow, describe a way of solidifying the roadbed.

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Railway Engineering III.

Maintenance.

1. Give the duties and responsibilities of a roadmaster.

2. Describe spiking and gauging the track.

3. Describe the summer work of a section gang.

4. Describe the lifting and tamping of a short piece of track in gravel ballast.

5. Describe the defects that are liable to exist in steel rails and give their causes.

6. Enumerate the different causes which affect the life of ties.

7. Describe creeping track and give the causes.

8. Describe shimming; where is it required? and describe the origin of its necessity.

9. By an illustration describe a right hand turn-out using a splits witch, and name all the parts.

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Railway Engineering III.

Structures.

1. Mention the different things that have to be considered in designing an ash pit.

2. Describe a method of supplying engines with sand by means of compressed air.

3. What are the different methods in use for coaling engines?

4. Enumerate the advantages and disadvantages of the square and polygonal engine houses.

5. If a turn table is 66 feet in diameter, and gauge side of rail to gauge side of rail is 8 inches at circle of turn table, and stalls of engine house are 14 feet face on inner polygon, what is the distance from centre of turn table to inner faces of round house?

6. Name the materials of which different passenger platforms are built, and give reasons for their selection.

7. What kind of doors are put on freight sheds? And why are they selected?

8. What principal features should be embodied in an ice-house design to insure success?

9. Give the specifications for plaster for the interior of a station building.

FACULTY OF PRACTICAL SCIENCE.

Electrical Engineering I.

1. The magnetic circuit of a generator is made up of parts as follows: Cast iron, length 8″, section 30 sq. in., $\mu=200$; sheet steel, length 7″, section 18 sq. in., $\mu=1800$; sheet steel, length 1″, section 10 sq. in., $\mu=1400$; air, length $\frac{1}{8}$″, section 14 sq. in. Calculate the ampere-turns required to produce a flux of 98×10^4 lines.

2. A 220 volt alternating current system supplies 50 enclosed arc lamps taking 6 amperes each at 110 volts with a power factor of ·75, induction motors aggregating 200 H.P. with a power factor of ·80 and an efficiency of ·85, and 400 incandescent lamps taking ·6 ampere each at 110 volts. Determine (*a*) the capacity of the generator, and (*b*) the power required to drive the generator, assuming its efficiency to be 90%.

3. A 10 H.P. 220 volt direct current motor runs normally at 1000 R.P.M. If a resistance of 2 ohms is placed in series with its armature, at what speed will it run when taking its full load current, and what power will it develop? How would you change its direction of rotation?

4. A 20 H.P. 2 phase induction motor is to operate at 200 volts. The distance to the point of supply is 400′. Determine the size of wire required if the line loss is not to exceed 5%. The power factor is ·88 and the efficiency ·85. How would you change the direction of rotation of such a motor?

5. Describe the 3-phase alternating current system. What is the principal advantage of this system? What would the current in each wire be if 500 H.P. is transmitted at 2200 volts, the power factor being ·9?

6. In a transformer designed to convert 2200 volts to 110 the magnetic circuit has a section of 250 sq. cms., and the magnetic induction reaches a maximum of 6000 lines per sq. cm. at a frequency of 60 cycles per second. Determine the number of turns on the coils.

7. An alternator has 10 poles and runs at 360 R.P.M. The flux per pole is 2×10^6. Calculate the E.M.F. generated in 80 conductors connected in series on the armature, assuming that the E.M.Fs. in each are in phase. What is the frequency?

8. Determine the relative amount of copper required to transmit a given amount of power (*a*) by direct current, 500 volts, (*b*) by alternating current 3-phase, 2200 volts, with unit power factor. Assume the loss to be the same in each case.

9. What is the meaning of the expression "100 volts" as applied to an alternating E.M.F.? A simple harmonic E.M.F. changes from a maximum of 200 volts to 0 in 1/240 second. Express this as a function of time.

10. Describe the mechanism, illustrating by sketches, and explain the operation of any type of alternating current arc lamp. Point out the advantages and disadvantages of the enclosed arc.

FACULTY OF PRACTICAL SCIENCE.

Electrical Engineering II.

1. A solenoid is 50 cms. long with a diameter of 2 cms. and is wound with 1000 turns. If a current of 2 amperes is passed through it, calculate the strength of the magnetic field at a point 30 cms. from its center on a line at right angles to its axis.

2. A wire carrying a current I turns a square corner. Determine an expression for the strength of the magnetic field on a line passing through the corner at 45° to each wire, in terms of the current I and the distance measured from the corner.

3. A constant E.M.F. is applied to the terminals of a coil of copper wire. The current gradually changes from 10 amperes to 8 amperes. Calculate the final temperature if the initial temperature is 20° C.

4. A small circular coil with 50 turns and 3 cms. diameter is suspended inside a solenoid and is free to rotate about an axis at right angles to the axis of the solenoid. Calculate the ampere-turns per cm. on the solenoid if an E.M.F. of 5 volts is generated in the coil when revolved at 1000 R.P.M.

5. A circular coil with 20 turns and 2 cms. diameter is placed so that its plane bisects the axis of a solenoid at right angles. The distance between the center of the coil and the axis of the solenoid is 10 cms. There are 2000 turns on the solenoid; its length is 50 cms., diameter 3 cms. Calculate the mutual inductance of the two.

6. The resistance of the solenoid specified in question 5 is 3 ohms. What current will flow if an alternating E.M.F. of 60 volts, frequency 60, is applied to its terminals?

7. The sectional area of the magnetic circuit in a transformer is 136 sq. cms., and its mean length is 55 cms. The transformer is used to change 2200 volts to 220, frequency 60, and there are 520 turns on the high tension coil. Determine (*a*) the number of turns on the low tension coil, (*b*) the maximum induction, (*c*) the hysteresis and eddy current loss, assuming the thickness of the laminations to be ·04 cm., and (*d*) the leakage current.

8. Connection is made between 110 volt alternating current mains, frequency 60, through a condenser of 200 microfarads capacity in series with a resistance of 10 ohms and an inductance of ·05 henry. Calculate (*a*) the E.M.F. between the terminals of each, (*b*) the current, and (*c*) the power.

9. A current of $10-3j$ amperes flows in a certain circuit when an E.M.F. of $50+20j$ volts acts on it. If the resistance of the circuit is 10 ohms, determine (*a*) the reactance, (*b*) the angle between the E.M.F. and current, and (*c*) the power.

10. The resistance of the high tension coil of the transformer specified in question 7 is 10 ohms. If a direct E.M.F. is applied to it, how long will it take the current to reach 75% of its final value?

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Electrical Engineering IV.

1. A Weston voltmeter in conjunction with a shunt is used to measure current. The range of the meter is 300 millivolts and its resistance is 2 ohms. The resistance of the shunt is ·01 ohm. What constant would you multiply its readings by to give amperes? What would the range be if a resistance of 1 ohm is placed in series with the meter?

2. The diameter of the armature of a 22 pole D.C. generator is 177 in. and the pole span is 72% of the pole pitch. The length of the air gap is 0·4 in., and the magnetic density in the gap at no load is 64,000 lines per sq. in. If the circumflux is 250 amperes per cm. at full load, calculate the magnetic density under the pole tips, assuming the field excitation and the permeability to remain constant.

3. Why is a generator compounded? Why over-compounded? What effect has compounding on a motor? Give reasons why it is or is not usual to compound motors. For what class of service, if any, is the compound motor suitable?

4. The armature of a 10 pole, 500-550 volt, 440 K.W. generator is parallel wound with 1856 conductors. The resistance of the armature is ·0175 ohm, of the series field coils ·0055 ohm. The polar angle is 27°. From the magnetic dimensions the following points on the magnetic characteristic are calculated:

Excitation per pole,	10350	12020	14320	17480	19550
E.M.F.,	460	500	540	580	600

How many series turns would be required to compensate for (*a*) the resistance drop, and (*b*) the demagnetising effect of the armature, assuming the brushes to be placed opposite the pole tips? How many turns would be required to effect the overcompounding?

5. If the generator specified in question 4 is not compounded, plot approximately its regulation curve, assuming the armature reaction to be constant.

6. A 15 H.P. 220 volt motor when running with no load takes 3 amperes in the shunt coils and 5 amperes in the armature. The resistance of the armature is ·25 ohm. Calculate the efficiency at one-quarter, one-half, three-quarter, and full load.

7. A motor-generator set is used to balance a three-wire system. The resistance of each armature is ·04 ohm. If the E.M.F. between the outer wires is 230 volts, and the current in the neutral is 50 amps., what would the E.M.Fs. between the neutral and outer wires be?

8. A battery of 800 ampere-hours capacity is to be installed on a 110 volt system for storage purposes. It must be capable of maintaining 115 volts, if necessary. Make out a detailed specification for the complete installation, indicating the connections by sketches.

9. Describe and discuss the relative merits of the various systems of speed control for direct current motors. What are the practical limits in each case?

10. Determine the relative weight of copper required for a 2-wire 110 volt system, and a 3-wire 220 volt system, assuming the section of the neutral wire to be 15% of the section of an outside wire. Allow the same loss in each case. Calculate the loss on the 3-wire system on the assumption that it is balanced.

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Electrical Engineering V.

1. A 100-volt Thomson integrating wattmeter, calibrated for use on a direct current circuit, is used on an alternating current circuit. The impedance of the armature circuit is $300 + \cdot 08j$. Will the meter read high or low? What will the percentage error be?

2. A rotary converter, 500 volts direct, is equipped with six rings, and is connected so that it will operate either on a 2-phase or 3-phase system, one ring being used for both. What would the E.M.F. between the 2-phase and 3-phase rings be?

3. What is the standard practice in generating, distributing, and utilizing electric power for railway work? Point out the weak points in the system and indicate the direction from which improvements are likely to come.

4. Two alternators A and B are connected to work in parallel. At no load the frequency of A is 60.5, and at full load of 500 K.W. it is 58. At no load the frequency of B is 60, and at full load of 300 K.W. it is 58.5. Determine the load on each and the frequency when they are working together to give 600 K.W. What load will A carry when B is running idle?

5. Two wattmeters A and B have their current coils in mains 1 and 2 of a 3-phase generator, and their potential coils connected to main 3. Meter A indicates 400 K.W. and meter B indicates 200 K.W. Assuming the system to be balanced, what is the power output and

the power factor? If the E.M.F. between mains is 2200 volts what is the current in each main?

6. A 2-phase generator has 14 poles, 5 slots per phase per pole, 6 conductors per slot, is star wound, and runs at 520 R.P.M. The flux per pole is 2×10^6. The form factor for one conductor is 1.12. Calculate the E.M.F.

7. A 2-phase generator gives 2300 volts at a frequency of 30 with no load. The resistance of one phase is ·2 ohm, and the reactance is ·05 ohm. Calculate the terminal voltage and the armature drop when delivering 40 amperes per phase to a circuit whose power factor is ·86.

8. A 2-phase 2200-volt generator, wound with 18 conductors per phase per pole, delivers 100 K.W. to a circuit whose power factor is ·9 Calculate the demagnetising ampere turns per pole.

9. Each circuit of an 8-pole 3-phase star-connected motor, operating on a 220-volt 60-cycle circuit, has the the following constants: $Y_0 = .02 - .1j$; $Z_1 = .04 + .1j$; $Z_2 = .02 + .06j$; $a = 2$. When loaded the speed diminishes 5%. Determine (*a*) the output, (*b*) the current input, (*c*) the power factor, (*d*) the efficiency, and (*e*) the speed.

10. The power taken by the motor specified in question 9 at no load is 325 watts (measured by wattmeter). When the primary current is 60 amperes per phase the drop in speed is 5% (by observation). The only constant known is the primary resistance. Calculate the efficiency.

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Electrical Engineering VI.

1. A railway generator is required to give 500 volts at no load and 1000 amperes continuously at 550 volts. The speed is to be 80 R.P.M. Determine (*a*) the number of poles, (*b*) the dimensions of the armature, (*c*) the number of slots, (*d*) the number and size of conductors, (*e*) number of commutator segments, (*f*) dimensions of commutator, (*g*) number and size of brushes, (*h*) dimensions of poles, (*i*) size of wire and number of turns for the shunt field coils, allowing 20% of the E.M.F. to be taken up on the rheostat, (*j*) the sectional area and number of turns for the series field coil, and (*k*) the efficiency.

2. Design an iron wire rheostat which will vary a current from 2 to 160 amperes at 110 volts in steps increasing from 2 to 20 amperes. Use only one size wire and allow a current density of 2500 amperes per sq. in., giving a temperature of 75° C. The resistance of iron wire may be taken as 7 times that of copper.

3. An 8-pole 120-volt direct current generator runs at 250 R.P.M. The armature core weighs 5200 lbs., and the teeth 950 lbs. The flux density in the core is 76,000 and in the teeth 90,000. The heat-radiating surface of the armature is 5000 sq. in. The resistance of the armature is ·00036 ohm. Determine the current capacity of the machine, allowing a temperature rise of 45° C. and a radiation of 2·5 watts per sq. in. of surface.

FACULTY OF PRACTICAL SCIENCE.

Hydraulics I.

[Any 7 questions, including 8 and 9.]

1. A circular disc 2′ diam closes the entry to a pipe. This disc is inclined at 60° to the horizontal, and its centre is 16′ below water level. Find the depth of the centre of pressure below water level, also the horizontal, vertical and normal pressures upon this disc.

2. A pipe of 1 sq. ft. area at A gradually contracts to an area of ·1 sq. ft. at B, then expands again to the original size. The velocity at A is 4′, and a piezometer at this point records a height of 20′. Find the height to which water will rise in a piezometer at B.

3. A dam with a vertical face is built in a V shaped gulch which slopes at 30° from the horizontal on each side. The dam is 15′ high and the water overflows it to a depth of 3′. Find the forces tending to overturn, also to push it out.

4. Under a certain head a stream issues from an orifice ·1′ diam. The diam of this stream at the *vena contracta* is ·06′. The discharge per second is 10 cu. ft. What is the actual head causing this flow, the orifice being a standard one?

5. A 6-inch pipe 2000′ long under a head of 70′ at its outlet was expected to deliver 2 cubic feet per second. How much more head would be necessary to give this delivery?

6. The rainfall in a drainage basin of 100 sq. miles is 12 inches during May, June and July. If 20 per cent.

of this can be collected into an irrigation ditch, find the length and best dimensions necessary to convey it through gravelly soil to a point 100′ lower down than the beginning of the ditch.

[V and C must be chosen.]

7. A tank of area 5 sq. feet receives 5 cubic feet of water per second and discharges through an orifice ·1′ in area. Find the level at which the water in the tank remains steady. If the supply ceases, how soon will the tank be empty? Use coefficients.

8. The dimensions of approaching stream are, 10 ft. wide, 4 ft. deep. The weir set in it is contracted; B=5′; H=1′. (*a*) Find the discharge by correct methods over this weir. (*b*) Find the value of H when the end contractions disappear and B=10′.

9. Calculate and compare the effective or actual H.P. existing in two streams each ·1′ area and issuing from nozzles attached respectively to a hose ·2′ diam. and a pipe 1′ diam., the head being 49 feet in each case. Length of hose or pipe 300′.

10. The Pelton Water Wheel Company gives the following data: H=100, diam. of wheel 1′, water needed 8.74 cu. ft. per minute, revolutions of wheel 765. If diam. of wheel is 2′ water needed is 46.58, and the number of revolutions of wheel 382. Find the relative H.P. of these two wheels and their speed compared with the theoretical velocity of the jet impinging on them. How does increasing the wheels' diam. under constant flow affect the H.P. produced?

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Hydraulic Engineering II.

Canals, Harbours and River Improvements.

1. When it is proposed to undertake the improvement of a river and a preliminary examination and report is ordered, state what information the plan and report should contain.

2. What are the conditions to be filled in the bettering of river navigation by the removal of bars and other obstructions? Describe some of the means employed for doing this class of work.

3. Describe Sloughing of a Levee at high water. What are the causes of Sloughing, and what are the remedies?

4. Sketch roughly a lock chamber with gates, walls and approaches. Name the different parts and describe the pressures that the different parts are designed to withstand.

5. Enumerate the conditions that every movable dam, not operated by the natural forces of the water, should fulfill as far as possible.

6. Sketch roughly a Chanoine wicket dam and describe its operation.

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Hydraulic Engineering III.

Water Power.

1. On a river having a slope of 2 feet to the mile, there is an existing dam and power house. Five miles down stream there is a new dam and power house being built. The dam is intended to raise the water 10 feet. What effect will it have on the old power plant? And why?

2. What is the usual section of the crest and down stream face of a dam of moderate height, which passes water over its crest at all stages of the stream? What are the reasons for adopting this section?

3. Describe three different styles of flash boards in common use. Where are they placed, and for what purpose?

4. Describe the construction of a timber spillway in the centre of an earthen dam. Why is it necessary and what governs its dimensions?

5. What is anchor ice? Where does it form? And where it is possible, what is the best way to prevent trouble from this cause?

6. Describe an Overshot, an Undershot and a Breast Water Wheel, and show why the efficiency cannot become unity.

7. Describe a penstock, flume and draught tube. Will the shape and size of the latter affect the efficiency of the machine?

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Structural Engineering I.

Building Construction.

1. Describe the three classes into which all stones used in building are usually divided.

2. Describe the following cut stone: Rough pointed, fine pointed, crandalled, cross-crandalled, axed, bush-hammered.

3. Describe the following: Bed, joint, coping, header, stretcher, bond, quoin, lintel, dowels and cramps.

4. What are the objections to using inverted arches for the support of piers in large buildings?

5. What will be the proportions of cement, sand and stone in a good strong concrete, the voids in the stone being 40%, and in the sand 33%, cement 10% in excess of the voids in the sand, and water 70% of volume of cement?

6. What are the causes of cracks appearing in long concrete walls? And where will they appear?

7. What will be the percentage of steel required in the cross-section of a reinforced concrete wall, elastic limit not to be exceeded, the rate of change of length for 1° F. being taken at 0·00000655 for concrete and at 0·00000657 for steel, the modulus of elasticity of steel at 29,000,000, and of concrete 3,600,000, and the ultimate tensile strength of concrete at 300 lbs. per sq. inch, and the elastic limit of steel at 37,000 lbs. per sq. inch.

FACULTY OF PRACTICAL SCIENCE.

Structural Engineering II.

Bridge Engineering.

1. Besides the plain plan and profile of a railway river crossing, what information should be embodied in the report to enable the best and most economic design to be decided upon ?

2. In designing a bridge pier describe the different forces that have to be taken into account in the calculation.

3. Describe the measuring of a base line to be used in the triangulation for piers of a bridge crossing a river 1000 feet in width.

4. Give a rough sketch of a wing wall abutment, elevation of base of rail 230·00, bridge seat 224·50, ground line 308·00, and elevation of foundation 303·00 ; width of bridge seat 4 feet, and depth 1′ 6″. Give dimensions and name parts.

5. Describe the methods of excavating material in a pneumatic caisson.

6. Describe the effect upon the workmen on entering and leaving an air-lock and state precautions to be taken.

FACULTY OF PRACTICAL SCIENCE.

Mechanical Engineering I.

1. It is required to drive a shaft 12 inches in diameter by a belt and pulley. What are the dimensions of the flat key used to fasten the pulley to the shaft? It is also required to connect another length of shafting to the first. What are the dimensions of the coupling, and the number and diameter of the coupling bolts, the latter being spaced about 8 inches apart?

2. A plain cylindrical boiler with hemispherical ends is 5 feet in diameter and 24 feet long. What is the thickness of the plates, the working pressure being 150 pounds per square inch and the allowable working stress 4 tons per square inch?

3. A mill receives power from a steel shaft which is driven by means of a belt on a 4-foot diameter pulley. The tension in the tight side of the belt is 6500 pounds. The pulley is fixed to the shaft 25 inches and 60 inches from the supports on either side. What diameter is the shaft?

4. How many times should a $\frac{7}{8}$-inch diameter rope be wrapped around a grooved wheel in order to transmit 250 H.P., the speed of the rope being 4000 feet per minute? Design, giving sketch and dimensions, the section of the rim of the wheel to be used.

5. Find the dimensions for the main bearings, crank pin and crosshead pin of a centre crank engine. The cylinder is 14 inches in diameter, the stroke is 16 inches, he rated H.P. is 100, and the speed is 300 R.P.M.

6. A rectangular tank is to be built of wrought iron plate which weighs 20 lbs. per sq. ft. Design the joint required to connect the plate, using the rules deduced from practice. Find the percentage strength of the joint.

7. In the design of a single cylinder condensing steam engine the following data is given: I.H.P.=400, stroke=2 ft., R.P.M.=80, boiler gauge pressure=74 lbs. per sq. in., steam to cut off at $\frac{1}{4}$ stroke, vacuum=25 inches of mercury, clearance=5% of stroke displacement, the exhaust valve to close so as to compress up to 25 lbs., the cylinder to be steam jacketed. Determine the diameter of the cylinder, thickness of cylinder head and of the cylinder walls. Assuming the bolts for the cylinder head to be $\frac{3}{4}$ inch in diameter, what number of bolts will be required, and what will be the pitch and number of threads if $f=3000$? Find the dimensions of the steam and exhaust ports. Determine the thickness of the steam chest walls. Design the piston, which is to be of cast iron, and to weigh 1300 lbs.

FACULTY OF PRACTICAL SCIENCE.

Mechanical Engineering II.

1. A leather belt is to transmit 3 H.P. from a pulley 14 inches in diameter on a shaft making 150 R.P.M. Find (*a*) the tensions in the belt on each side of the pulley if the belt embraces three-fifths the pulley rim, (*b*) the width of the belt if a double belt is used, the value of f being 0·3, (*c*) the speed of belt corresponding to the maximum H.P. it can transmit.

2. A marine engine indicating 600 H.P. at 65 R.P.M. drives a ship at a speed of 11 miles per hour. The thrust block is a collar where outside diameter is 14 inches and inside diameter 10 inches. The value of f being 0·1, find the work lost per revolution and the lost H.P.

3. In testing an engine making 223 R.P.M. with a Prony brake attached, the lever arm of which was 4 feet 6 inches long, the pressure weighed on the scales was 500 lbs., what H.P. was being transmitted to the brake by the engine? The cast iron fly-wheel of the engine was 4 feet in diameter. Allowing a stress of 1300 lbs. per sq. inch, how many R.P.M. could the wheel safely make?

4. If the weight of the rod of an unloaded pendulum governor is 5 lbs., the length of the rod measured to the centre of the ball is 10 inches, and the length of the lever is 5 inches, find the weight of the balls to give a mean speed of 50 R.P.M. What are the values of the mean angular velocity and the height of the pendulum? The extreme variation of speed is not to exceed $\frac{1}{16}$ of the

mean speed. Determine the total vertical movement of the balls necessary to accomplish this result.

5. The section of a cast-iron fly wheel rim is rectangular, 2 inches thick by 12 inches wide. The flange at the joint is 5 inches deep from the inner face of the rim, and is $2\frac{1}{2}$ inches thick. The sections of the rim are fastened together by a 2-inch diameter bolt at each joint. The centre of the bolt is 3 inches from the bottom edge of the flange. The rim speed is $\frac{3}{4}$ of a mile per minute. In one of the joints the bolt is so loose that the two parts of the joint do not touch each other. Find the stress on the bolt, the stress in the bolt, the stress in the rim due to bending, the direct stress in the rim due to centrifugal tension (per sq. in.), the total stress per sq. inch, and the stress due to bending in the flange.

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Mechanical Engineering IV.

[NOTE.—Students in Mining and Civil Engineering are required to pass in Part I. only. Students in Electrical and Mechanical Engineering must pass in Part II. and the last 6 questions of Part I.]

I.

1. Describe fully the action and movement of heat in the furnace of a steam boiler from the beginning of combustion of the fuel to the evaporation of the water as steam. Where is the greatest resistance offered to the passage of the heat?

2. Sketch and describe a Babcock and Wilcox water tube boiler. What advantages has this type of boiler over the fire tube type?

3. Explain what is meant by "incrustation" in a boiler and give methods for prevention of same.

4. Sketch and describe (*a*) a steam gauge, (*b*) a water gauge.

5. In a lever safety valve, the diameter of the valve is 6″, the valve and spindle weighs 18 lbs., the weight placed on the lever is 100 lbs. and is 60″ from the fulcrum end of the lever. The lever weighs 44 lbs. and is 70″ long. The centre of the valve spindle is 5″ from the fulcrum. At what pressure will the safety valve blow off?

6. What is the use of a steam separator? Sketch and describe action of one.

7. A horizontal return tubular boiler, 5′—7″ dia. by 12′—0″ long, having 86 fire tubes 3″ dia., the grate being 4′—1″ by 5′—0″ ; tested during a continuous run of 11 hours, consumed 3580 lbs. of coal, containing 524 lbs. ash and 8% moisture. The composition of the coal was : C—87%, H—2%, N—1.2%, O—4%, the remainder being ash. The steam developed was 24584 lbs., which was primed 1%. The boiler pressure was 92.3 lbs. gauge, and temperature of feed water 194° F. Calculate (*a*) the builder's rated H.P., (*b*) the developed H.P. A.S.M E. rating, (*c*) the equivalent evaporation from and at 212° F. per lb. of coal and per lb. of combustible, (*d*) the air per lb. of coal determined by coal analysis.

8. In the design of a boiler it is required to develop 300 H.P. Calculate (*a*) the heating surface, (*b*) the size of feed water pipe, assuming the feed to be at a constant speed, (*c*) the size of steam pipe, assuming the volume of 1 lb. of steam to be 10 cubic feet, (*d*) the amount of coal the boiler will require, if the thermal value of the coal is 13800 B.T.U. and the efficiency of the furnace is 80%.

9. (*a*) What is the principle involved in the action of a mechanical stoker as regards the prevention of smoke? (*b*) Sketch and describe the Roney stoker as applied to the B. & W. Boiler.

10. (*a*) State the use for which a centrifugal pump is the most efficient. (*b*) Sketch and describe a centrifugal pump with admission on one side.

II.

1. (*a*) Sketch and describe fully the action of an injector for feeding water to a boiler. (*b*) Calculate the water injected per lb. of steam when an injector is supplied with dry steam at 110 lbs. gauge pressure, and with water at

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Mechanical Engineering V.

1. A $10'' \times 15''$ Diesel single-acting oil engine runs at 250 R.P.M. The ratio of compression, which begins at the end of the stroke, is 14, and the cut off (end of isothermal expansion) occurs at $\frac{3}{16}$ stroke. Determine the H.P. and the thermodynamic efficiency. Assume 1·35 for the index of the adiabatic lines.

2. Power is distributed throughout a mill by belts. All the power delivered by the engine is first transmitted to a main shaft to which machines taking a total of 50 H.P. are connected. A second shaft is belted to the first one, and machines taking a total of 200 H.P. are belted to this shaft. A third shaft is belted to the second one, and machines taking a total of 150 H.P. are belted to this shaft. Determine (*a*) the friction loss, (*b*) the slip loss, and (*c*) the H.P. of the engine. The friction loss in one transmission may be taken at 8%, and the slip of belts 1%.

3. The system of belt transmission described in question 2 is to be replaced by a rope drive with each shaft driven separately from the main engine. How many $1\frac{1}{2}''$ ropes will be required for each shaft, allowing a maximum stress in the rope of 150 lbs. per sq. in., and a rope velocity of 4000 F.P.M.? Assume the angle of the pulley grooves to be 45°, μ to be ·25, and the arc of rope contact to be 170°.

4. If the coefficient of friction and the speed of the belts in question 2 are the same as for the ropes in

question 3, determine the total friction loss with the rope drive, assuming the friction loss to be proportional to the sum of the belt tensions.

5. The machinery in a mill requires 500 H.P. to be delivered to the main shaft. Specify the following requirements for the steam plant: Steam pressure; type, speed, and dimensions of engine; type and dimensions of the condenser and pumps; method of heating feed water; number and capacity (heating surface) of boilers; height and size of chimney.

6 Determine the amount of heating surface required in a closed feed-water heater for a boiler plant which evaporates 15,000 lbs. of water per hour, the temperature of the hot-well being 100° Fahr. How is such a heater usually arranged? What quantity of exhaust steam at atmospheric pressure would the heater condense?

7. The temperature of the gases leaving the boilers in question 6 is 450° Fahr., and the temperature of the feed-water is 180° Fahr. What annual saving would be effected by installing economizers? The cost of coal is $3.50 per ton, and the evaporation is 9 lbs. from and at 212° per lb. of coal.

8. In a wire rope transmission system extending over an elevation, the inclination of the cableway to the horizontal at a given point is 30°. The vertical distance from this point to the summit of the elevation is 300 ft. What is the maximum weight which could be pulled past this point by a steel cable composed of 114 wires, the diameter of the wires being ·067 in., and the diameter of the pulley at the summit being 8 ft.? The maximum stress in the rope must not exceed 40,000. Allow 30 lbs. per ton for friction on the carriage. $E = 29 \times 10^6$.

60° F. the delivery temperature of the mixture being 160° F.

2. (*a*) Sketch and describe the boiler setting for a horizontal multitubular boiler. (*b*) Explain method of supporting this boiler.

3. Describe fully the process of producing gas to be used in a gas engine.

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Mechanism.

1. (*a*) The fly-wheel of an engine is 10 feet in diameter and makes 60 R.P.M. How fast does a point on its periphery travel? (*b*) How far from the centre of this wheel would a point be located having a linear velocity of 10 feet per second?

2. The crank of an engine is 10 inches long, and the connecting rod is 60 inches long. Calculate and find graphically the position of the instantaneous axis when the crank, on the crank end stroke, makes an angle of 30 degrees with the centre line of the engine.

3. The distance between the axes of two cylinders in rolling contact is 3 feet; one makes 25 revolutions while the other makes 15. Find the diameters of each cylinder for external and for internal contact.

4. Find graphically a bell crank lever to give a motion along a horizontal slide equal to one-third that along a slide making an angle of 45 degrees with the first. Prove the construction geometrically.

5. Show how to construct a Whitworth quick return motion so that the period of return equals one-half the period of advance.

6. Design a pantograph that would enable you to reduce drawings to one-third their size, and explain its construction.

7. In a system of driving, the pulley A, upon the main shaft, drives the pulley B by means of a crossed belt.

The spur gear C, on the shaft with B, drives the pinion D. The pulley E, on the shaft with D, drives the pulley F by an open belt. Given: A, 30 inches in diameter, and making 60 R.P.M.; B, 15 inches in diameter; C, 60 teeth; D, 15 teeth; E, 30 inches in diameter; and F, 10 inches in diameter. How many R.P.M. does the pulley F make and in what direction does it turn relatively to A?

8. A shaft making 200 R.P.M. has upon it a pulley 36 inches in diameter carrying a belt upon its periphery, which transmits 5 H.P. (*a*) Calculate the effective pull on the belt. (*b*) What diameter should the pulley have in order that the effective pull may be 50 lbs.?

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Descriptive Geometry.

1. A line 3 in. long makes an angle of 45° with the vertical plane and 30° with the horizontal plane. Draw its plan and elevation.

2. A point is 2 in. above the horizontal plane and 1 in. in front of the vertical plane. Draw the traces of a plane containing the point and making angles of 60° and 45° with the vertical and horizontal planes respectively.

3. A plane, whose vertical and horizontal traces make angles of 30° and 45° respectively with the ground line, cuts a second plane whose vertical and horizontal traces make angles of 45° and 30° respectively with the ground line. The two planes intersect the ground line in points A and B respectively, which are 3 inches apart. Find the angle between the two planes.

4. Two rectangular buildings, 120 ft. by 60 ft. and 100 ft. by 40 ft. respectively, intersect centrally, their axes making an angle of 75° with each other. Each building has side walls 30 ft. high and is covered with a roof of 30° pitch. Draw plan and elevation on a scale of 20 ft. to the inch.

5. Draw the plan and elevation of a square ABCD of 2 inch side when the points A, B, D are respectively 3 in., $1\frac{3}{5}$ in. and 2 in. above the horizontal plane, and the plan of the side AD makes an angle of 45° with the ground line.

6. The three faces of a trihedral angle are 30°, 45° and 60°. Find the three angles.

7. Draw the development of an elbow for a 3-inch pipe.

8. Draw an axometric projection of a cube of $2\frac{1}{2}$ in. edge, with the angles between the axes 105°, 120° and 135°.

9. A, B, C and D are four points on the ground line, and AB=BC=CD=2 in., A being to the left hand side. A′ and D′ are the hor. and vert. traces of a line A′D′, and AA′=DD′=2 in. Likewise C′ and B′ are the hor. and vert. traces of a second line C′B′, and BB′=CC′=4 in. Draw the common perpendicular to the lines A′D′ and C′B′.

FACULTY OF PRACTICAL SCIENCE.

Graphical Statics.

1. A rafter 20 ft. long and inclined at 45° with the horizontal is uniformly loaded with 50 lbs. per lin. ft. Find graphically the horizontal thrust on the wall, the vertical reaction on the wall, and the direction and amount of thrust at the foot.

2. Two plate girders of 50 ft. span support equally an engine and tender of 102 tons wt., distributed as follows:

2	ft.	from	left	support.....16000 lbs.
10	"	"	"	.....28000 "
15	"	"	"	.....28000 "
20	"	"	"	.....28000 "
25	"	"	"	.....28000 "
33	"	"	"	.....19000 "
38	"	"	"	.....19000 "
43	"	"	"	.....19000 "
48	"	"	"	.....19000 "

Find the reactions and maximum bending moment for each girder.

3. Draw the stress diagram for a roof truss (Fig. I. on blackboard) with the following data: Span 60 ft., rise 20 ft., fixed at C, resting on rollers at B, BD=DE =EA=DH=EH=12 ft., trusses 10 ft. centre to centre; wt. of roof, including truss, 25 lbs. per sq. ft.; normal wind pressure on AB, 20 lbs. per sq. ft.

4. A through truss for a highway bridge (Fig. II. on blackboard) of 100 ft. span consists of 5 panels of 20 ft. each and is 20 ft. high, dead load per lin. ft. 400 lbs.,

live load per lin. ft. 1000 lbs. Draw stress diagrams (*a*) for dead load, (*b*) for live load with joint F unloaded and G, H and K loaded, (*c*) for live load with F and G unloaded and H and K loaded. Tabulate the maximum dead and live load stresses in all the members of the truss.

FACULTY OF PRACTICAL SCIENCE.

Graphical Statics.

[For Civil Engineering students only.]

1. A Warren truss of 72 ft. span consists of 4 panels of 18 ft. each. The inclined members make an angle of 60° with the horizontal. (Fig. III. on blackboard.) Draw stress diagrams (*a*) when joints B, C, D are loaded with 9000 lbs. each, (*b*) when joints C and D are loaded with 18,000 lbs. each.

FACULTY OF PRACTICAL SCIENCE.

Surveying I.

1. Define: Horizontal Line, Vertical Line, Sensible Horizon, Real Horizon, Apparent Horizon.

2. Describe the process of chaining a line over rough ground.

3. Describe the three principal adjustments of the Wye Level.

4. To find the Bubble constant of a Dumpy level, a rod was held at a distance of 95·0 ft. and a reading of 4·725 ft. observed; the line of sight was then elevated until the bubble had moved through 5 divisions and a reading of 4·837 ft. observed. What is the value in seconds of 1 division of the bubble? If the length of a division is 0·1 in. what is the radius of curvature of the bubble?

5. A line measured with a railway chain is found to be 1487·2 ft. long, and with a Gunter's chain, 22·445 chains. The railway chain is afterwards found to be 0·15 ft. too short. Find the error in the Gunter's chain.

6. The notes of a compass and chain survey are as follows:

Course.	*Bearing.*	*Dist. (Gunter's Chains.)*
AB	N 30° E	15.0
BC	S 60° E	33.0
CD	S 30° W	15.0
DA	N 60° W	33.0

Find the area of the field by the method of latitudes and departures. Give answer in acres.

Sin. 30° = Cos. 60° = 0 5
Cos. 30° = Sin. 60° = 0.866

7. In leveling up a slope from A to B the following backsights and foresights were obtained successively:

(A) 8·64	1·86
9·73	0·42
8·93	1·62
5·73	0·48
10·89	3·67 (B)

Make out a set of level notes, and find the elevation of B, assuming the elevation of A to be 100.

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Surveying II.

1. How would you determine the horizontal distance from a given point to a visible but inaccessible object?

2. Describe in their proper order the adjustments of the dumpy level.

3. The notes of a compass and chain survey are as follows:

Sta.	*Bearing.*	*Dist. (Gunter's Chains).*
A	S·69°15′E.	7·06
B	N·37°15′E.	5·93
C	N·39°30′W.	6·00
D	S·57°45′W.	4·65
E	S·30°00′W.	4·98

Balance the survey and find the area in acres by the method of latitudes and departures.

4. Describe a special form of protractor for use in plotting stadia surveys.

5.

Sta.	*Grade.*	*Elev.*	*S.R.*	*S.L.*
107+00	89·5	96·5	23·4	21·0
107+75	89·5	89·5	11·0	11·0
108+00	89·5	86·5	13·0	12·0

Width of roadbed 22 ft. in cut, 16 feet in fill, slopes $1\frac{1}{2}$ to 1. From the above data find the amount of cut and fill in cub. yds. between stations 107 and 108.

6. Describe a method of passing an obstacle in laying out a railway curve and illustrate the method by an example.

7. The intersection angle of two tangents is 35°. It is decided to connect them by a $5\frac{1}{2}$ curve. The chainage of the P.I. is 117 + 60·5. Find the chainage of the B.C. and E.C.

8. Show that in the sextant the angle between the incident and finally reflected ray is twice the angle of the mirrors.

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Surveying III.

1. Notes of precision measurement of a line with steel tape, spring balance, and thermometer are as follows :

Sta.	*Elev.*	*Temp.*	*Dist.*	*Pull.*
79	47·65			
		57°F.	99·432	15 lbs.
80	49·93			
		63°	99·769	
81	52.08			

Coeff. of Exp. for steel, 0·0000065. With standard pull of 15 lbs. at 50° F. tape was 0·005 ft. too long. Find true horizontal distance from Sta. 79 to 81.

2. Describe a method for making a contour survey of a tract of ground.

3. In taking a stadia reading with the rod held vertical, the lower reading was 2·73, the upper 5·84. Vertical angle 32°. Focal length of object glass 12 in. Dist. of obj. glass from centre of inst. 8 in. What is the horizontal distance from instrument to rod ?

4. Give the exact method to be used in finding the true meridian by an observation on Polaris at elongation.

5. What is meant by the following terms: *Section, Township, Block, Jog, Correction line, Base line, Azimuth, Range, Witness monument.*

6. Draw a sketch of a township subdivided according to the 3rd System.

7. Describe the location and construction of a boundary Monument consisting of post, mound, and pits for a section corner, for a township corner, and for a corner on a correction line.

8. How would you arrive at the proper elevation of outer rail on a 5° curve? What relation does the elevation of outer rail bear to the length of spiral? What would be the length of a spiral for a 4° curve?

9. Describe a method of putting in a vertical curve between two grades.

THEOLOGY.

HONOURS.

O.T. Criticism.

HISTORY.

1. Give your view of the origin of the Hebrew people, and of their entrance into Palestine.

2. Discuss the historical value of the book of Judges; compare its representations with those given in the book of Joshua.

3. Give the main events in the life of David and state their significance for the history and religion of the Hebrew people.

4. State what you know about the two periods of Isaiah's ministry. Give the dates.

5. State the effect of "The Exile" on the Hebrew people. Criticise Smith's view of "The Return."

6. Give in bare outline the periods of Jewish History from "The Return" to the beginning of the Christian Era.

7. Give a brief account of the Maccabean Revolt, its cause and results.

FACULTY OF MEDICINE.

Senior Medical and Surgical Anatomy.

1. Outline the external surface of the cerebrum, showing fissures, convolutions and important centres.

2. In what situations may pain be felt in (*a*) ureteral calculus, (*b*) aortic aneurism? How reflected?

3. Give (*a*) the covering of inguinal hernia, (*b*) the operation for pus in the pericardium.

4. Give the landmarks for the spleen, left kidney, pleura.

5. Account for the deformity in fracture of the lower third of the tibia, extra capsular fracture of the femur, backward dislocation of the elbow.

HONOURS.

O.T. Criticism.

ARAMAIC—EZRA.

1. State briefly (*a*) the contents of the book of Ezra, (*b*) its relation to other Old Testament Books, (*c*) its probable date and historical value.

2. State (1) what you know about the Aramaic dialect and the reason for its use in Old Testament books, (2) the principal points in which it differs from Hebrew.

3. Give in both languages: the king, the kings, man, God, he wrote, he will write, who, it shall be known.

4. Translate Ezra, IV. 12-14; v. 11-13; VII. 15-17.

5. Parse each word in Ezra IV. 15; v. 1; VI. 5.

HONOURS.

O.T. Criticism.

THE PILGRIM PSALMS.

1. What is the most probable meaning of the phrase, "Song of Degrees"?

2. Mention some linguistic peculiarities of these Psalms and show their bearing on the question of date.

3. Discuss from the standpoint of these Psalms the validity of the titles in reference to authorship.

4. Psalm CXXXIII. Discuss the critical questions that have been raised concerning the structure of this Psalm.

5. Translate with notes, where necessary, the following passages: Psalms CXXII. 8-9; CXXIV. 1-5.; CXXVI. 1-7.

6. CXXX. Translate this Psalm, adding brief notes (*a*) exegetical, (*b*) expository.

7. State what you know of Dr. Cheyne's "Jerahmeel theory" in its application to the Psalter.

EXAMINATION FOR B.D.

Comparative Religion.

FOURTH PAPER.

1. Point out the defects in the representation of God's character given in the Koran.

2. What are the tests by which the real worth of a religion is to be estimated? Show that tried by these tests Mahommedanism is inadequate.

3. To what causes may the first success of Mahommedanism be ascribed?

4. What was the ideal aimed at by Confucius, and what did he make his starting point for its realisation?

5. What is the foundation of a right system of thought and life, according to Confucius?

6. State the causes of the great success of Buddhism in gaining adherents.

7. Explain (1) the meaning of Karma. (2) The formula "I take my refuge in Buddha, in Dharma and in Sangha."

EXAMINATION FOR B.D.

Apologetics.

FIRST PAPER.

1. State the objections urged by Hume against the inference from the conformity of design in the world to an intelligent Creator.

2. Explain how the Deistic movement of the 17th century arose out of the critical testing of the ecclesiastical tradition of the Church in the Reformation of the 16th century.

3. Give a brief statement of Philo's conception of God.

4. Show that the assumption of Nature's uniformity and immutable conformity to law involves a belief in God.

5. State the pre-Darwinian conception of the Teleological argument, and how the argument has been affected by Darwin's investigation of Nature.

6. State (1) the ethical side of the prophetic hope of Israel, (2) its national side, (3) the ultimate issue of this hope.

7. "All external incitements only become temptation by the letting loose an inner impulse to the bad in the strivings of which the real temptation first exists." Discuss this statement in relation to the temptation of (1) the first Adam, (2) the second Adam.

8. State somewhat fully Pfleiderer's view of the origin of the disciples' belief in the Resurrection of Jesus, and criticise it.

EXAMINATION FOR B.D.

Apologetics.

SECOND PAPER.

1. What arguments may be urged against (1) the Polytheistic view of the universe and man, (2) the Pantheistic view?

2. How is the objection that the Theistic view of God is anthropomorphic to be answered?

3. Show (1) that a self-existent cause does not come under the law of causality, (2) that a secondary cause is in reality not a cause at all.

4. "Conscience is the religious organ of the soul." What is meant by this? Criticise, pointing out the error of the assertion.

5. State the argument for the existence of God, based upon the nature of knowledge. What is the value of the argument?

6. Explain how the idealism of the last century gave rise to Materialism.

7. "It is in its non-recognition of the moral relations on which the communion of sinful man with a holy God ought to rest, that Pantheism most signally fails as a religion." Show how this is true.

EXAMINATION FOR B.D.

Apologetics.

THIRD PAPER.

1. Against what point of the Christian faith was the attack of unbelief directed (1) in the time of Celsus, (2) in the eighteenth century?

2. What were the conceptions of the eighteenth and nineteenth centuries, respectively, regarding the nature of a Divine revelation?

3. "The religion of Israel, as expressed in the prophets, was the outcome of a monotheistic tendency inherent in the Semitic races." Show that this view is untenable.

4. Trace the growth of the faith of the first disciples in the Divinity of Jesus.

5. "How am I to get into right relations with my fellowmen?" How did Jesus answer this question?

6. "So long as we have the testimony of Christian experience we do not require the testimony of the historical records that Jesus rose from the grave and lives." What objections may be urged against this view?

7. If Christianity is to be regarded as the absolute religion, what demand of Faith and Philosophy must it satisfy?

EXAMINATION FOR B.D.

Holy Scripture—Old Testament.

General.

1. Sketch briefly the life of Moses as given in Exodus.

2. State where the following are found and the nature of their contents: "The Blessing of Jacob," "The Song of Moses," "The Song of Miriam," "The Song of Deborah," "David's Lament over Saul and Jonathan."

3. Give a few texts illustrating the characteristic teaching of Deuteronomy.

4. State what you know about the books of Haggai and Zechariah.

5. Give briefly the substance of the prologue of Job.

SPECIAL.—ISAIAH.

1. Give a bare outline of the contents of the book.

2. What impression is made as to its character and authorship by an examination of its contents? Give illustrations.

3. Give quotations from chapter XL. and the substance of chapter LIII.

4. What is the subject of chapter VI. and to what period does it belong?

EXAMINATION FOR B.D.

Apostolic Fathers.

1. What was Ussher's contribution to the Ignatian Question?

2. Discuss the claim of the Curetonian Recension to represent the true Ignatius.

3. Describe the environment of Ignatius and show how his views on the Church were affected by it.

4. Translate with notes: Ephesians, IX. and XIX.; Magnesians, III. and VIII.

5. Give an account of the Epistle to the Romans and explain its unique character among the Ignatian letters.

EXAMINATION FOR B.D.

Apostolic Fathers.

1. Discuss the date and authorship of the Epistle of Clement to the Corinthians.

2. Give some account of the Pseudo-Clementine recognitions.

3. How far is Clement a Paulinist?

4. Translate with notes Chaps. 5, 20, 25, 37, 40 of Clement's Letter to the Corinthians.

5. Characterize the style and intellectual quality of Clement.

EXAMINATION FOR B.D.

Systematic Theology.

THIRD PAPER.

The Church.

1. Discuss Paul's use of the word "Ecclesia", as applied (1) to the several local Ecclesiae, and (2) to the one universal Ecclesia.

2. What authority did the apostles exercise in the primitive Church?

3. Examine the terms ἐπίσκοπος, πρεσβύτερος and διάκονος as used in the Pastoral epistles.

4. How is the supremacy of the Bishop accounted for by Hatch?

5. What was the relation between church officers and ordinary members in the early Church, and how did Church officers come to be regarded as a separate class?

Church Organization.

Treat the following subjects:

1. The protest of Montanism.
2. The contribution of Cyprian.
3. The influence of Monasticism.
4. Pre-Reformation anti-sacerdotalists.

EXAMINATION FOR B.D.

Church Doctrine.

Treat the following subjects:

1. The so-called Athanasian creed.

2. The significance of miracle in the history of Christianity.

3. Anselms's view of the Atonement.

4. The Nicene Creed as a formula of Christian unity.

EXAMINATION FOR B.D.

Systematic Theology

FIRST PAPER.

The Christian Conception of God.

1. Distinguish Christian Theism from (1) Deism, and (2) Pantheism.

2. What elements in the Hebrew idea of God are assumed in the teaching of Jesus?

3. What is distinctive in the teaching of Jesus regarding God?

4. Examine the statement: "The Trinity is the distinctively Christian idea of God."

5. Compare the Trinitarian and Unitarian teaching regarding the Fatherhood of God.

EXAMINATION FOR B.D.

Systematic Theology.

SECOND PAPER.

The Christian Doctrine of Sin.

1. What are the main features of the Hebrew idea of Sin? Compare the Hebrew idea with that of the Greeks.

2. What is the teaching of the Gospels regarding a personal Power of evil?

3. What is meant by "Original sin", and what is the teaching of Scripture regarding it?

4. Discuss the nature of sin, (1) as the opposite of holiness, (2) as the opposite of love of God. Are we entitled to say that "The innermost essence of sin is selfishness"?

5. Examine the theory that ascribes the orign of evil to man's sensuous nature.

EXAMINATION FOR B.D.

Holy Scripture, N.T.

I. General.

1. Outline the contents of (1) the Gospel according to Matthew, (2) the Epistle to the Galatians *or* 1st Timothy.

2. Give a synopsis of Paul's career as detailed in Acts of the Apostles, chapters 13-28.

3. Write fully (1) the parable of the unjust judge, (2) the narrative of the raising of the widow's son at Nain, (3) Peter's account of his visit to Cornelius.

4. State the context of the following: "For when I am weak then am I strong." "Be thou faithful unto death, and I will give thee a crown of life." "But the Jerusalem that is above is free, which is our mother." "And wisdom is justified of all her children." "But the day of the Lord will come as a thief."

II. Special.

1. Give an outline of the Gospel according to Mark.

2. (1) How many parables does Mark record? (2) Name any that are peculiar to him. (3) What miracles of our Lord are narrated only in his Gospel?

3. Relate carefully Mark's account of (1) The Temptation. (2) Peter's denial of Jesus. (3) The descent from the cross and burial.

4. What incidents excited the hostility of the Scribes?

5. Set the following in their context:—"We never saw it on this fashion." "Thou art not far from the Kingdom of God." "He is not the God of the dead, but of the living." "This kind can come out by nothing save by prayer."

History of Dogma.

1. Give some acconnt of the Angelology of later Judaism.

2. How far can Essenism be explained as a developement of Pharisaism?

3. Discuss the relations between John the Baptist and Jesus.

4. Explain the seeming contradiction between utterances of Jesus as to the Law.

5. Show what is involved in Jesus' treatment of divorce, the Sabbath, and things clean and unclean.

6. Show the significance of the title "Son of Man."

7. Expound briefly the parables of the Leaven, and the Mustard Seed.

8. "Wherever the carcase is, there will the vultures be gathered." Unfold the suggestions of this saying.

9. Show how the central conception of God determines the details of Jesus' teaching.

Church History.

1. What seems to have been the basis for the authority of James in the primitive Church of Jerusalem?

2. How did the Synagogues of the Dispersion prepare the way for St. Paul?

3. Describe the condition of the Church at Corinth in the time of Paul.

4. Discuss the influence upon the Christian Church of the private associations of the Graeco-Roman world.

5. Give and examine the views as to the character of the Apostolate.

6. Show the importance of the Prophet's office in the early Church and explain its decline.

7. Examine the theory of Apostolic Succession.

8. Discuss the original relations of Bishops and Presbyters.

9. Show the importance of the Eucharist in the growth of the Bishop's power.

10. Expound the ecclesiological theory of Clement of Rome and of Ignatius.

N.T. Criticism.

1. Give a brief account of the rise of the "common" dialect in Greek.

2. What differentiates the Greek of the Septuagint and N.T. writings from that used by Polybius, Philo and Josephus?

3. On what occasion was the first rational confession of the Messiahship of Jesus made?

4. What is the aim of the writers of the 1st and 3rd Gospels?

5. Give reasons for concluding that Mark's is the earliest Gospel.

6. Mention the different stages of Jesus' ministry as narrated by Mark.

7. Give an outline of Luke's Gospel, and point out the sections that correspond to Mark's narrative.

N. T. Exegesis.

1. Discuss the explanations of the nature of the star (Matt 2:2) which have been offered.

2. Give the true meaning of *βάπτισμα μετανόιας εἰς ἄφεσιν ἁμαρτιῶν.* (Mark 1:4). Point out the distinctive difference between the baptism of John and that of Jesus.

3. What is the general lesson inculcated in Matt. 2:21-22?

4. Explain Matt. 5:19-20.

5. Why is the reading *δικαιοσύνην* to be preferred to *ἐλεημοσύνην*, Matt. 6:1? Give the Aramaic word of which both readings are a translation.

6. Explain the apparent contradiction between the statements of Matt. 2:23 and 1st Sam. 21:1-6.

7. Give the interpretation of: (1) Matt. 6:13. (2) Matt. 4:11-12. (3) Matt. 16:18-19. (4) Lk. 16:9. *ποιήσατε ἑαυτοῖς . . . . σκηνάς.*

8. Show how the first clause of Lk. 16:1 connects this chapter with the preceding one.

9. Did our Lord intend that the precepts of the Sermon on the Mount are to be obeyed in the letter? Discuss this question.

10. Distinguish *νέος* and *καινός*, Mk. 2:22, and give comparison of *κράτιστε*, *ἐλαχίστῃ.*

O.T. Criticism and Exegesis.

THE PSALTER.

I.

1. Write a brief note on the structure and growth of the Psalter.

2. Mention briefly the subject and character of any three of the following Psalms: III., V., X., XIV., XV., XVIII., XXII., XL.

3. Discuss as thoroughly as you can the date of Psalm I.

4. Write a brief note on the structure of Psalms XXIV. and XIX.

II.

1. Parse each word in Psalm LI. 9; XXXII. 1; XXXIX. 10.

2. Translate carefully XXIX. 1 and XXXII. 6 and 9.

3. Psalm LXXIII. (*a*) State briefly and clearly the line of thought running through the Psalm.

(*b*) Translate with brief grammatical and critical notes the first three verses.

4. Translate and explain LI. 6.

[A pass is required in both parts of this paper.]

Systematic Theology.

Lectures.

[Three questions will be regarded as a full paper.]

1. State briefly the Development of the doctrine of the Personality of the Holy Spirit.

2. How may Answers to Prayer be classified or defined?

3. Mention points of resemblance in the attitudes of St. Paul and Luther to the religious tendencies of their respective periods.

4. Romans VIII. 3: "God, sending His own Son in the likeness of sinful flesh, and for sin, condemned sin in the flesh." 2 Cor. v. 21: "Him who knew no sin, God made sin on our behalf: that we might become the righteousness of God in Him."

Comment upon these two statements.

5. Refer to Old Testament incidents or statements expressive of the idea of Mediation as available for Salvation or rescue in one or other connection.

How have these or any of them been used to interpret the phrase, "Satisfying the Divine justice"?

Systematic Theology.

Manual.

[Four questions will be regardrd as a full paper.]

1. State the Object, Elements, Stages in the activity, and Crowning result of Saving Faith. Indicate the difference between Faith *on* Christ and Faith *in* Christ; and mention the evil consequent upon emphasising the former.

2. Outline the Essence, Duties and Limits of Christian Sanctification,—in contrast with the doctrines of works of Supererogation and of Canonisation.

3. On what ground rests the doctrine of the Perseverance of Saints? How would you maintain it against objections?

4. Define the work of Grace; and refer to the Origin of its operation in man, the Reason of its necessity, and some objections urged against it.

5. Outline the Pelagian, Augustinian and Synergistic doctrines of the operation of Grace. What danger besets Determinism? And what, in reference to Grace, is the "Unsolved Problem"?

HONOURS.

The Hexateuch.

1. What do you consider to be the *character* of the contents of Genesis?

2. Mention parts of Genesis which are assigned to the different documents.

3. State what you know about the structure and date of Deuteronomy.

4. Mention and discuss some objections to the "Documentary Theory."

5. With what other Old Testament books are Leviticus and Deuteronomy related and in what way?

6. State the work done by any two of the following: Astruc, Richard Simon, Geddes, Vater, Ilgen, Hupfeld, Colenso.

7. Show that the "Fragment Hypothesis" was a hopeless theory in the early stages of the movement, but that we now can recognise a measure of truth in it.

Apologetics.

FIRST PAPER.

1. In what ways may the Christian minister help to make the time less skeptical?

2. Explain the Theistic theory of evolution. What proofs can you furnish that evolution is not an irrational process?

3. State and discuss the theories as to the origin of (1) matter, (2) life.

4. What proofs do the sciences offer in support of the view that man has been developed along the line of animal ascent?

5. How is the teaching of the Genesis record as to the moral lapse of the first man to be interpreted in the light of evolution?

6. A world in which moral evil exists can not have been created by, neither can it be under the control of, a perfect moral Being.

Apologetics.

SECOND PAPER.

1 What constitutes man a person? Show that we are justified in ascribing personality to God, though He be infinite.

2. If God be immanent in the universe, how can He at the same time be transcendent?

3. Show that to regard spirit or thought as a function or product of matter is (1) philosophically a fundamental error, (2) subversive of morals.

4. "The sum of all knowledge and duty is Secular, and it pertains to this world alone." Criticise this.

5. The laws of nature are invariable in their action, therefore to pray for material blessings is of no avail. Discuss this statement.

6. Define Socialism, and show that the testimony of history furnishes ground for believing that the Gospel is capable of solving the social questions of our time.

MEDICINE.

FACULTY OF MEDICINE.

Pharmacology—First Year.

1. Distinguish between: Antiseptic and disinfectant, contagion and infection, stimulant and irritant. What agents would you employ in disinfecting (*a*) hands, (*b*) instruments, (*c*) stools of Typhoid Fever, and (*d*) sick room after an infectious disease?

2. What is meant by the medicinal dose of a drug? What circumstances modify the dose? How determine the dose for a child 2 years old?

3. What are the advantages and disadvantages of Hypodermic medication? Mention an agent so used, giving dose and indications for use.

4. How do the following drugs influence digestion: Alcohol, strychnine, and potassium bicarbonate?

5. Mercury. Give action on alimentary tract. Mention the principal preparations with dose of each. Name the preparations containing free mercury. Give symptoms of Hydrargyrism.

6. How do the iron salts prove curative in anaemia? What circumstances would influence you in the selection of a preparation of iron? Name four of the preparations of iron with dose of each.

FACULTY OF MEDICINE.

Animal Biology.

1. In what forms is the energy of the body expended? What is its immediate and its remote source?

2. Name the essential parts of a flower. Explain how plant fertilization takes place.

3. Describe the social life of the honey bee, also the life history of the tape-worm.

Junior Physiology.

1. Describe the structure of the skin and give rules for its care.

2. Enumerate the various mechanisms for the care of the eye. Describe the middle ear.

3. What sensations originate from nerve impulses that start from the skin? How do we know that these impulses are transmitted by different sets of nerve fibres?

4. Mention the two principal constituents of bone. Deduce from this composition of bone, rules for its growth and care.

5. Explain how the *general* blood supply of the body, and the *local* supply to different organs, are regulated.

6. Describe the action of the pancreatic juice upon food.

7. Explain how the oxygen of the air passes down to the air-sacs of the lungs.

FACULTY OF MEDICINE.

Histology.

1. Describe minutely adenoid tissue as it really is, and microscopic appearance. Enumerate where found.

2. Give the histology of trachea, (L) and (H) power. Distinguish from intra-pulmonary bronchus and bronchiole.

3. Describe a liver lobule and a portal canal. Distinguish the structures found in the latter.

4. Compare (*a*) cardiac end of stomach and pyloric end, (*b*) fallopian tube and ureter.

5. Draw, describe and identify the specimens submitted.

FACULTY OF MEDICINE.

Junior Anatomy.

1. Write notes on ossification of clavicle and name muscles and ligaments attached thereto.

2. Write notes on the distinctive characteristics of a cervical vertebra and describe fully the axis.

3. Describe the knee joint under the headings (*a*) classification, (*b*) bones entering into formation, (*c*) ligaments, (*d*) muscles in relation with knee joint.

4. Give the boundaries and floor of the cubital fossa and name the structures contained therein.

5. Write notes on (*a*) costo coracoid membrane, (*b*) bicipital fascia, (*c*) posterior annular ligament of wrist, (*d*) ligamentum teres, (*e*) femoral ligament.

6. Give origin, insertion, and nerve supply of following muscles: (*a*) Triceps, (*b*) pronator radii teres, (*c*) external pterygoid, (*d*) trapezius, (*e*) obturator internus.

FACULTY OF MEDICINE.

Junior Chemistry.

1. (*a*) State Avogadro's law. (*b*) Show its connection with the calculation of molecular weights from the densities of gases.

2. Express in words and by equations the result obtained by burning in oxygen the following substances: Sulphur, phosphorus, marsh gas, ammonia.

3. Where the substances in the above reactions can exist as gases, write the equations so that the volumes can be compared and state the relative volumes.

4. What is the action of sulphuric acid on (*a*) copper, (*b*) potassium nitrate, (*c*) potassium iodide, (*d*) calcuim-chloride, (*e*) zinc oxide?

5. How is chlorine obtained? What are its properties? What is its action on potassium bromide, on sulphur dioxide and on ferrous chloride?

6. (*a*) Name three sulphides of metals that may be obtained by passing sulphuretted hydrogen through acidulated solutions of salts of the metals. (*b*) Name three sulphides that will yield sulphuretted by the action of sulphuric or hydrochloric acid on the sulphides. (*c*) Write the equations.

7. (*a*) Define equivalent weight, atomic weight and molecular weight. (*b*) Indicate how they are found. (*c*) Apply your definitions to chlorine, oxygen, sulphur, and mercury.

8. (*a*) How are hypophosphites obtained? (*b*) What

is produced at the same time? (*c*) Write the formulae of sodium hypophosphite and of calcium hypophosphite.

9. What volume of gaseous ammonia measured at 15° C. and under 570 min. pressure can be obtained from 20 grammes of ammonium chloride? (Full value will be given if the factors are properly written down, even though the arithmetic is not worked out. The examiner will furnish any atomic weights asked for.)

10. State the law of reciprocal proportions and show that it is essential in establishing the atomic weights of the elements.

FACULTY OF MEDICINE.

Junior Medical and Surgical Anatomy.

1. Ligate the ulnar artery, the posterior tibial artery upper third.

2. What position is assumed by the limb in dislocation of the hip (dorsum ilii), in subglenoid dislocation of the humerus?

3. Give the action of the following muscles: Gluteus, maximus, adductor magnus, tibialis posticus, pectoralis major, and supinator brevis.

4. Give the landmarks for the brachial artery, for the musculo spiral nerve; the blood and nerve supply of the hip joint.

FACULTY OF MEDICINE.

Senior Anatomy.

1. Describe fully the thyroid gland, giving its nerve and blood supply.

2. Describe the ethmoid bone.

3. Give the disposition of the dura mater, its nerve and blood supply.

4. Give the dissection necessary to expose the external plantar artery, its course and distribution.

5. Give the relations (peritoneal and visceral) of the uterus. Name its ligaments and describe fully its blood supply.

6. Write notes on (*a*) Torcular Herophili, (*b*) thoracic duct, (*c*) ductus communis choledochus, (*d*) Wharton's duct.

7. Give the course and distribution of (*a*) hypoglossal nerve (12th cranial), (*b*) radial artery, (*c*) radial nerve.

8. Write notes on the lymphatic system of the lower extremity.

FACULTY OF MEDICINE.

Second Year Pharmacology.

1. What agents would you employ to check hemorrhage from (*a*) stomach, (*b*) nose, (*c*) lungs, (*d*) intestinal tract? In what form and strength would you employ them in each case?

2. Give the influence of the following upon the genito-urinary tract: Digitalis, caffeine, copaiba, belladonna and benzoic acid.

3. Anaemia with symptoms of palpitation, impaired digestion, constipation, etc. Write a prescription to be dispensed in (*a*) liquid form, (*b*) pill form.

4. Define hypnotic. Distinguish between hypnotic, narcotic, and general anaesthetic. Mention the principal hypnotics, with doses.

5. Describe minutely the different steps in locating the seat of convulsions due to strychnine.

6. (*a*) Distinguish between anodyne and anaesthetic. How does cocaine prove anaesthetic? Give strengths and indications for use.

(*b*) Chloroform as an anaesthetic. How administered? Note precautions and dangers in its use. How treat the threatened collapse?

FACULTY OF MEDICINE.

Senior Physiology.

1. How would you demonstrate the rate at which nerve impulses pass out to muscle? Also, the effect of alcohol upon muscle?

2. Explain and illustrate what is meant by the local and general effects produced by vaso-motor nerves. Describe Conheim's experiment.

3. Specify the different functions of the bile salts.

4. Describe the nervous mechanism of respiration. How does the respiratory system affect the vascular one?

5. Explain how you would obtain two proteids from milk. Discuss the effects of food, and of the nervous system, upon the secretion of milk.

6. Indicate the location of the cell bodies, and describe the relation of the neurons composing the posterior roots of the spinal nerves. Give the evidence in support of your statements.

7. Describe the pathway of nerve impulses when a sound is heard and we look round to discover its cause. Use a diagram to illustrate your answer.

FACULTY OF MEDICINE.

Senior Chemistry.

1. State in words and show by graphic formulae the relation between alcohols, ethers, esters, mercaptans and thioethers.

2. Build up the equation for the action by which aldehyde is obtained from alcohol, potassium dichromate and sulphuric acid.

3. Show the relation between the paraffin, olefine and acetylene series of hydrocarbons. Give any general method by which the members of *any* of the series may be produced.

4. (*a*) Show the relation between ammonium cyanate and and urea. (*b*) Describe how the latter can be formed from inorganic materials.

5. Describe any medicinal compound that is a derivative of benzene, showing its connection with benzene and the steps by which it is produced.

6. Discuss *chemical equilibrium* such as that obtained when alcohol and acetic acid are mixed.

7. Show the kind of reasoning by which the constitution or graphic formula is arrived at for acetic acid, *or* ethyl cyanide and isocyanide, *or* glycerine, *or* pyrogallol, *or* acetanilide.

8. Discuss the relation of the heats of formation of compounds to their stability. Give examples.

9. Discuss the influence of dissolved substances upon

(*a*) the freezing point, (*b*) the boiling point, and (*c*) the vapour pressure, of the solvent.

10. In what respects are the process of dissolving, evaporation, melting of ice and deliquescence similar to chemical changes?

FACULTY OF MEDICINE.

Sanitary Science.

1. Describe the methods of spread and the measures advisable to prevent the dissemination of (*a*) typhoid fever, (*b*) diphtheria, (*c*) malaria, (*d*) tuberculosis.

2. Discuss the value (advantages and disadvantages) and uses of bichloride of mercury, carbolic acid, formalin, sulphur dioxide and potassium permanganate as disinfectants.

3. Describe methods you would advise to disinfect (*a*) typhoid stools, (*b*) tubercular sputum, (*c*) room and bedding after scarlet fever.

4. What diseases are commonly disseminated through water? Mention some ways in which water may be purified on a domestic scale. Which would you advise in time of threatened epidemic from water borne disease?

5. The following summary of an analysis of water is received by you. What conclusions would you draw from it?

Water derived from surface well in sterile vessel, bright and clear, quite palatable, earthy odor on heating, no particular sediment.

Free ammonia	0·185 per 100,000.
Albumenoid ammonia	0·08 " "
Nitrites	traces.
Nitrates	3·2 per 100,000.
Chlorine	6·5 " "

Sample shows 8000 bacteria per 1 cc, of which an average of 12 are Bacillus Coli. Streptococcus are also present in detectable numbers.

FACULTY OF MEDICINE.

Medical Jurisprudence and Toxicology.

[N.B.—Answer five questions only.]

1. Mention and describe where necessary the various ways in which the process of putrefaction may be modified.

2. Give in detail the internal and external signs of asphyxia.

3. A dead body having wounds and burns upon it is found in a burning building. Mention possible causes of death and outline your method for determining the actual cause.

4. How may blood stains be identified? Describe the methods employed.

5. Give symptoms, treatment, fatal period, fatal dose and post-mortem signs in a case of acute phosphorus poisoning.

6. Give symptoms, treatment, fatal period and fatal dose in a case of acute opium poisoning.

FACULTY OF MEDICINE.

Junior Surgery.

1. Define: Gangrene, pyæmia, shock, caries.

2. (*a*) Mention three varieties of gangrene, (*b*) symptoms of senile gangrene. (*c*) What is the chief pathological factor in the production of senile gangrene?

3. Mention in detail the steps in the procedure of treating an ordinary incised wound of the leg.

4. Symptoms, diagnosis and treatment of (*a*) simple cutaneous erysipelas, (*b*) tetanus.

5. Symptoms and treatment of acute infective periostitis.

6. Treatment of simple acute synovitis; diagnose this condition from hæmarthrus.

FACULTY OF MEDICINE.

Junior Obstetrics and Pediatrics.

1. Describe briefly, the Ovum, the Deciduae, the Funis.

2. Give the nerve supply to the Uterus, and explain the nervous mechanism of Uterine Contractions.

3. Diagnose and treat a case of Right Occipito Posterior.

4. You are called to a case in the first stage of labor and find a profuse uterine hemorrhage going on. What would be the most likely cause of the hemorrhage? How would you treat the case?

5. What are the functions of fat in the system? What are the indications (*a*) to increase, (*b*) to decrease the percentage of fat in a child's diet?

6. Give (*a*) the symptoms, (*b*) the complications that may arise. (*c*) The treatment in a case of Oxyuris Vermicularis.

FACULTY OF PRACTICAL SCIENCE.

Geology of Canada and Geology II.

1. Compare the archean of Eastern Ontario with that of Northern Ontario. Mention particularly likenesses and differences.

2. Describe the area in Quebec lying south of the St. Lawrence River, mentioning its economic products.

3. "Oil has been found in the following formations: Trenton, Utica, Hudson River, Niagara, Guelph and Corniferous." Discuss fully how you would recognize these formations.

4. Discuss the gold-bearing area of Nova Scotia.

5. Of what age are the coal-bearing formations of Western Canada, and what fossils would you expect to find in them?

6. Write full notes on the "Interior Plateau" of British Columbia.

7. Discuss glaciers under the following heads: Causes, fissures, moraines, regellation theory of flow, retreating stages.

8. State the theories held regarding the nature of the earth's interior, and discuss any one of them fully.

9. Discuss the sources of the heat and force necessary for the production of volcanic eruptions.

FACULTY OF MEDICINE.

Junior Practice of Medicine.

1. "A man is only as old as his arteries." Discuss this statement.

2. Give the symptoms, blood findings, and treatment of chlorosis. Write a short account of the chemistry of the gastric juice in this condition.

3. Describe the symptoms and physical signs of acute broncho-pneumonia (capillary bronchitis.)

4. Give the symptoms of (*a*) over-thyroidization, (*b*) under thyroidization of the human system due to changes in the thyroid gland.

FACULTY OF MEDICINE.

Senior Medical and Surgical Anatomy.

1. Outline the external surface of the cerebrum, showing fissures, convolutions, and important centres.

2. In what situations may pain be felt in (*a*) ureteral calculus, (*b*) aortic aneurism? How reflected?

3. Give (*a*) the covering of inguinal hernia, (*b*) the operation for pus in the pericardium.

4. Give the landmarks for the spleen, left kidney, pleura.

5. Account for the deformity in fracture of the lower third of the tibia, extra capsular fracture of the femur, backward dislocation of the elbow.

FACULTY OF MEDICINE.

Senior Obstetrics and Gynaecology.

I. Obstetrics.

[NOTE.—Six only of the eight questions to be answered, of which *three* must be obstetrical and *three* gynæcological. All questions of equal value.]

1. In a vertex presentation, *left occipito-posterior*, describe the mechanism when posterior rotation takes place. In such a case describe the application of the forceps and delivery of the head.

2. What are the principal causes of *abortion?* At what periods does it most frequently occur? What are the symptoms of an incomplete abortion?

3. What are the causes of ante-partum hemorrhage? How would you recognize and manage a case of accidental hemorrhage occurring during the first stage of labor?

4. Enumerate the causes of eroded and fissured nipples. Describe the management and treatment.

II. Gynæcology.

5. Give the symptoms of mutilocular ovarian cystoma. With what other conditions might it be confounded? Give the differential diagnosis of any two enumerated.

6. Enumerate the causes which lead to the formation of pelvic abscess.

7. Give the varieties of hypertrophic elongation of the cervix uteri. How may it be diagnosed from prolapse of the uterus in the third stage?

8. What is syncytioma malignum (malignant deciduoma)? Give the causes, symptoms and prognosis.

FACULTY OF MEDICINE.

Diseases of Eye, Ear, Nose and Throat.

1. (1) What is Cataract? (2) What are the different varieties? (3) State the method of making a diagnosis. (4) State the treatment of each variety.

2. For what conditions of the Eye are the following remedies suitable: (1) Atropine, (2) Eserine, (3) Yellow Oxide of Mercury, (4) Argyrol, (5) Acetate of Zinc? Write a prescription for each of these drugs.

3. (1) By what natural means is air supplied to the middle ear? (2) Describe the effects of closure of the eustachian tube. (3) Describe the various methods of inflation of the middle ear.

4. What are the causes of Dysphagia? How would you proceed to determine the cause in a given case?

5. A child of five years of age constantly breathes through the mouth and snores at night so as to annoy and distress the parents. Sleep is restless and disturbed by nightmare. The child has a stupid and listless expression and is said to be dull at school. There is slight deafness, but no earache. The voice has a peculiar, dead, non-resonant character. There is a dry, tickling cough, an irritating nasal discharge, producing excoriation of the skin around the nose and lips. There is the deformity of the chest known as pigeon breast. Discuss this case in regard to (1) Diagnosis, (2) Prognosis, (3) Treatment.

FACULTY OF MEDICINE.

Bacteriology.

1. Describe the structure of the bacterial cell. Give the general requirements for and methods of growth and propagation of bacteria.

2. Give examples of two ways in which an active immunity against bacterial disease may be obtained, and outline the theoretical method of formation of the immunizing substances.

3. Give the distribution, morphological and distinctive cultural characters of the staphylococcus pyogenes aureus. Name some of the lesions in which it is usually the causal agent.

4. Outline a method of making a bacteriological diagnosis in a case of suspected diphtheria. How would you prove that bacillus obtained was actually the diphtheria bacillus?

5. What are "acid-fast" bacteria? Differentiate between the forms which might be met with in this country in making bacteriological diagnoses.

6. Describe the distribution and general morphological and cultural characters of the bacillus coli communis. In what lesions may it be active? What is its import when found in drinking water?

FACULTY OF MEDICINE.

Senior Practice of Medicine.

1. Treat all the complications that may ordinarily arise in a case of typhoid fever between the 15th and the 25th day.

2. Describe the symptoms of psoriasis and differentiate this condition from (*a*) eczema, (*b*) syphilis.

3. Give the etiology, symptoms, prognosis and treatment of apoplexy.

4. What is neurasthenia? Describe the symptoms and briefly outline your management of a case.

5. Trace a few of the more important pathologic effects on the adult tissues of the regular and persistent over-indulgence in (*a*) food, (*b*) alcohol.

6. Describe the clinical course of a case of facial paralysis, due to exposure to cold, and briefly indicate your treatment of this affection.

FACULTY OF MEDICINE.

Senior Surgery.

1. Give very briefly the symptoms and treatment of the following: Erysipelas, burns, syncope, acute ephiphysitis.

2. Diagnose subspinous dislocation of the humerus from fracture of the surgical neck of humerus.

3. Symptoms of first and second stages of tuberculosis of hip joint. Outline briefly your management of first stage. Explain the use of Bradford's fixation frame. Give the incision for curetting the joint.

4. Describe your treatment of a fracture about the middle of femur.

5. Symptoms of concussion of the brain. Explain "relapsing unconsciousness." Describe briefly the operation of trephining.

6. Outline your incisions in amputation through (*a*) lower part of leg, (*b*) middle of arm. Describe the operation for appendicitis performed during the interval.

FACULTY OF MEDICINE.

Pathology—Third Year.

[N.B.—Answer 5 questions only. All questions of equal value.]

1. Give the differential blood characters of a grave chlorosis and pernicious anaemia.

2. Give the usual sites, causes and lesions of acute simple endocarditis. Summarize the dangers immediate and remote of this affection.

3. What are the requisites for hypertrophy of an organ? Give the causes and their method of action in hypertrophy of left ventricle of heart.

4. What is fever? What are its causes and into what stages or periods may it be divided, giving characters of such periods?

5. Give the diagnostic features of sarcomas. Classify these tumors and describe any one variety in detail.

6. What are the conditions which lead to thrombosis? Describe the series of changes which may occur in a thrombus in a vein.

FACULTY OF MEDICINE.

Pathology—Fourth Year.

[N.B.—Answer 5 questions only. All questions of equal value.]

1. Describe the mode of infection and the lesions of tubercular meningitis.

2. Describe the causes, lesions and terminations of acute general peritonitis. Mention the bacteria which are usually met with.

3. Describe fully the usual lesions met with in chronic ulcerative phthisis.

4. Describe the more common bone lesions of acquired syphilis.

5. Describe the pathology of "enlargements" of the thyroid gland.

6. Describe shortly the pathology of acute forms of appendicitis.

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